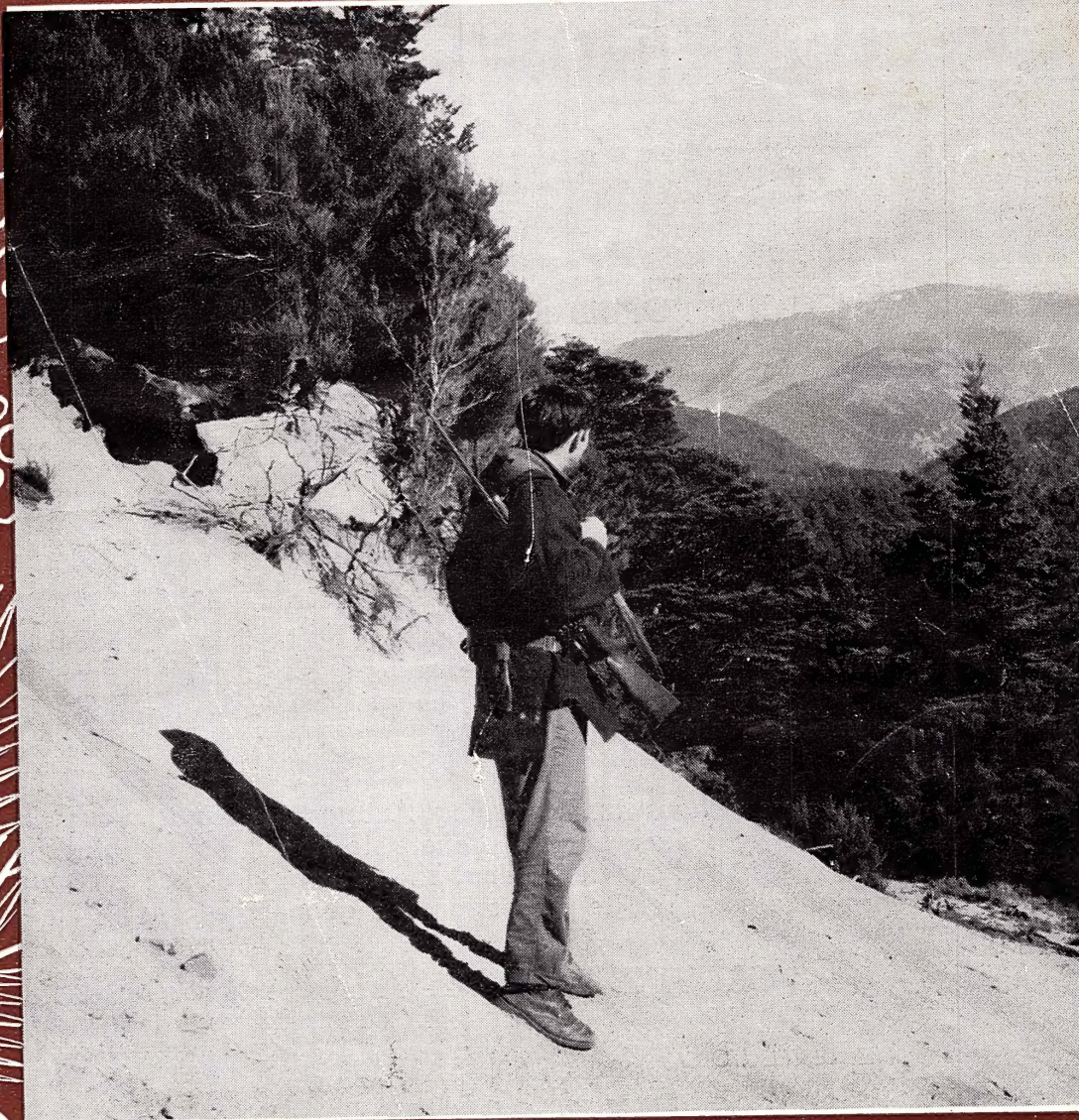


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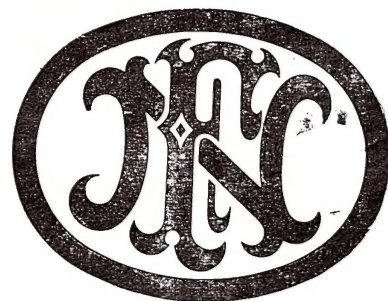


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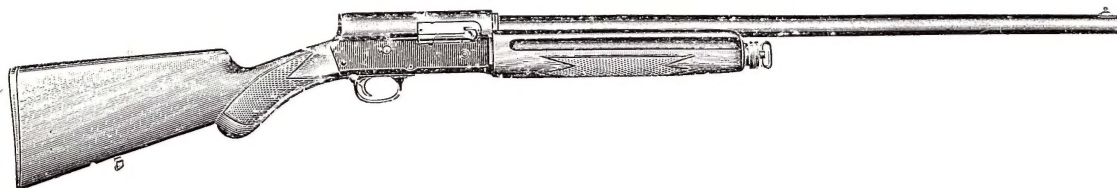
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N.Z. OUTDOOR

Vol. 35, No. 11.

March, 1971.

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COVER PICTURE

Stalking Sika in the Kawekas, Hawke's Bay. Photographed on 35 m.m. Canonflex, 1/125th sec. at f11.

—Photograph by A. Livesay.

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A monthly magazine devoted to fishing, shooting, wildlife and kindred sports. Published by Associated Publications, P.O. Box 236, Masterton, to whom all correspondence should be addressed.

The Editor is prepared to consider articles and stories of interest to the outdoorsman, particularly if accompanied with suitable illustrations or glossy black and white photographs. Contributions other than those for "What's On Your Mind?" will be paid for on the 20th of the month following publication. No material submitted will be returned unless accompanied by a stamped addressed envelope. The publishers will take all care but will not be liable for accidental loss or damage to any material submitted. Contributions should preferably be typewritten and double spaced, and sender's name and address should be indicated on back of copy, photographs etc. While the publishers wish to cover as wide a range of views as possible, it must be understood that opinions expressed in articles or stories are not necessarily those of the publishers.

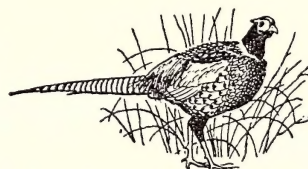
PRICE INCREASE OF N.Z. OUTDOOR

It is with some regret that we have to announce that as from the April 1971 issue there will be an increase in the price of "N.Z. Outdoor".

It has always been our policy to keep the price of the magazine as low as possible and give our readers value for money. Overhead costs have spiralled considerably since our last increase four years ago and we have endeavoured to absorb these, but now the production of the magazine is by no means an economic proposition at the low rate of \$3.00 a year. We have, therefore, been reluctantly compelled to adjust subscription rates to \$3.60 a year posted. Cost of a single copy from booksellers will be 30 cents.

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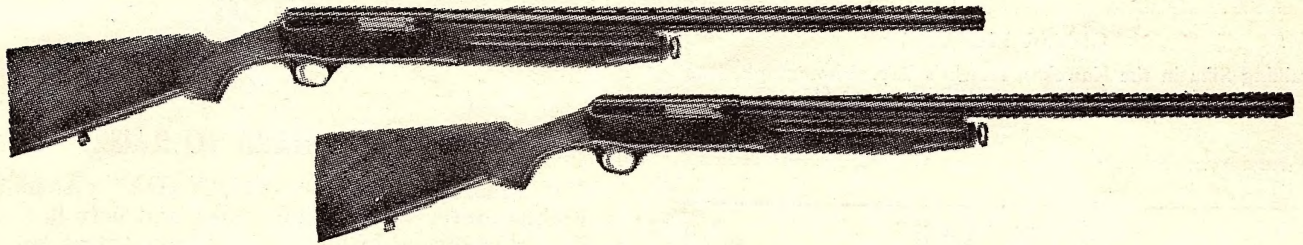
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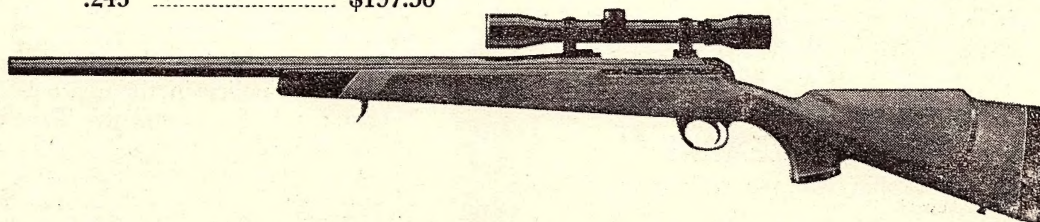
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Editorial

MEAT HUNTING — GOOD OR BAD?

Is meat-hunting compatible with proper game management of the country's deer herds? Is meat-hunting ethical? Is meat-hunting ruining hunting?

These and other questions relating to the commercial exploitation of deer, are hotly debated wherever hunters gather.

Attempting to look at the matter from both sides is naturally difficult. Against meat-hunting is the undeniable fact that in its present form it often approaches indiscriminate slaughter. No consideration of game management is shown. Pregnant hinds and stags in the velvet are seen, through the sights of the meat-hunter, as dollars on the hoof.

No game management policy could embrace meat-hunting in its present form.

There is argument that meat-hunting is hardly the way to encourage a youngster to become a sportsman. His early lessons are those likely to be most indelibly imprinted on his hunting character and an outlook which is entirely mercenary-motivated can dictate his hunting. Selective shooting is something the youngster is unlikely to appreciate.

Commercial exploitation of fish and game is repugnant to the true sportsman. So the ethical side of meat-hunting is justifiably opposed by a sportsman. A sportsman hunts for sport and not for financial gain.

There is also the argument that meat should not be left in the bush to rot. Naturally it is far better to recover it. It is similarly unethical to allow waste, and there is no reason why venison should not be fully and properly used.

The commercial value of game is compatible with game management, ethically it can go hand in hand with game management.

The difference probably lies in the fact that at the present time, virtual slaughter has accompanied the commercial venison industry. When game management is implemented, there will be a need to cull animals where the population warrants. Animal reduction is part of the game management picture.

If herd reduction was necessary, then the venison should be recovered, but here is the essential difference, the profits from the sale of the meat recovered, should be returned to a game management fund, rather than the pockets of private individuals.

A case in point, is the present permitting of a private company to recover venison from the Fiordland wapiti blocks. How much more far-sighted, ethical and in the public interest, if the venison was recovered by the sportsman or the National Park Board, and the profits turned into the Park Board funds?

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Credit Due Sir,—I would like to answer "Sam's" reply to my letter on the Marine Department's research record, which appeared in the January *Outdoor*. Regarding the diaries he has sent in, I can only say "Good on you, Sam." Obviously "Sam" has the future well-being of his sport at heart, and I would agree that it is discouraging to get only one reply.

However, mistakes do occur, but the experience of my friends and I, who have also sent in diaries has been different. I would like to point out though that the important thing is to return the diary, for the information it contains is of value as "Sam" obviously realises. As for the technical publications, they are available as I have them mailed to me regularly. There is much more information available now than 15 years ago, so perhaps "Sam" could try again.

I am aware that 15% of anglers' licence fees go to the Marine Department for research, and I am also aware, from reading the results of this research, which is published in the technical publications, that this money is put to good use. This 15% however, only represents a part of the total spent on freshwater research. Research takes several years to complete, and several years of applying the results before any return can be expected. This is possibly the case in the districts that "Sam" refers to, and if he expects quick results, then I'm afraid that he may be due for disappointment. I mentioned both points in my first letter.

I am not aware of the instances of the Hawke's Bay pollution problems and the Rangitikei that "Sam" mentions, and if this is the case, then fair comment. I am aware, however, that suitably qualified staff are not easy to obtain, and that overseas countries can offer more attractive salaries. Perhaps, to attract more qualified men to do these jobs when the need arises, "Sam" would agree to the research levy being increased by say 20%, on the principal of the user pays?

I feel that "Sam" is getting off the subject of the Marine Department research record with his comment on the Hinemaia dam and trout farming. I am not familiar with the Hinemaia dam, but regarding the trout farming issue it seems to me that the villain is more likely the Fishing Industry Board. The department as a government agency would have to adhere to government policy in this matter. Perhaps "Sam" has "conveniently forgotten" the Tongariro power scheme, or the Manapouri scheme, to both of which the Marine Department raised objections. But what chance would it have against the N.Z.E.D. and the agreement with Comalco? Perhaps the N.Z.E.D. was involved in the Hinemaia dam? Government policy would again prevail.

"Sam" criticises the competence of the Department's technical staff in the field of fish diseases. This is a specialised subject, and my above comments on acquiring suitably qualified men apply here. As I mentioned in my previous letter, the Department employs highly qualified and competent staff, as I know from having worked with many of them, and I think that credit is due to them for the work that they are doing. I feel that much of the criticism of the Department's research reflects unfairly on its research staff. At the risk of seeming repetitious, I would again say that in my opinion this criticism arises not because of a lack of research so much as a lack of adequate publicity given to the results. There appears to be a breakdown in communication between research staff and anglers, who as "Sam" pointed out are paying 15% of their licence money towards research.

No doubt many of the readers of this magazine will disagree with me, and my opinions. I do not think that the Department is above criticism, but that criticism without knowledge of the facts can damage relations between anglers and research men who could profitably work in together. Yours etc.—R. Boud (Southland).

* * *

Helicopters In Fiordland In the February issue of *N.Z. Outdoor*, there appeared a letter by "Wapiti Will" concerning the use of commercial operators in the wapiti block for herd reduction. I agree with "Wapiti Will", on two counts.

One is that meat hunting is not compatible with game management and the other is the fact of commercial interests being allowed to profit from exploitation of the "people's National Park". Funds from any herd reductions should go back into the Park or the management programme of the N.Z.D.A. and not into the pocket of an exploiter.

If any N.Z.D.A. member agrees with the use of helicopters by private firms in the wapiti block, then shame upon him. The wapiti herd is a unique herd deserving of game management and not commercial exploitation. Yours etc.—WAPITI-WOG (Hawke's Bay).

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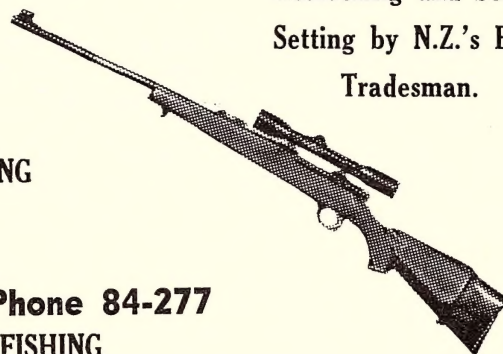
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TROUT FISHING — WAIKAREMOANA

by C. E. JONES

From time to time one hears anglers grumbling about the lack of trout in their favourite fishing areas; but no grumbles have been so consistent as those about the Waikaremoana Lake area.

The Minister of Internal Affairs, Mr. Seath, in accordance with a promise made by him to a deputation from the Wairoa Rod and Gun Club and the Wairoa Angling Club that there would be a full-scale investigation to establish what action might be necessary to improve the fishing; has had the Lake Waikaremoana area and all streams flowing into it, except the Hopu-ruahine River from its source to the main Rotorua-Wairoa highway bridge, declared an "Experimental Fishing Area" under the Lake Waikaremoana Experimental Waters Regulations 1970, made by an Order in Council.

For two years Officers of the Department of Internal Affairs made sample surveys of all spawning streams in the area, and for the major research, chose the Waio-tukupuna Stream for the location of a research fish trap. This stream was chosen because it was large enough to enable a permanent trap to be established in it, the Department was able to obtain Ministry of Works approval for the use of the bridge crossing the stream to give two natural sides to the trap, and moving in it were a reasonable number of both species of trout of average size.

The trap was set up in April 1970, and permanently manned during the spawning season. Officers lived and worked in what were frequently unpleasant conditions as they camped beside the trap to police it and be on hand in case of damage by flash flood. The men spent their days even in the finest weather, in cold wet conditions as they netted the trout moving upstream through their trap.

The hundreds of trout netted were measured and weighed, their species and sex determined and all information recorded, then the fish were marked by the removal of half the right pelvic fin. This fin soon re-grows but carries a distinctive straight scar which is easily recognisable.

The trout were then released upstream from the trap to continue their journey to the natural spawning grounds.

The Department has released 2,500 tagged fingerlings in the lake over the last five years, and when caught these will give an indication of the rate of growth in the lake.

During the 1970/71 season, in addition to their normal Rotorua fishing licences, all anglers fishing Lake Waikaremoana need a special permit. The permit, incorporating an angling diary, is part of the information required to be completed and returned to the Wildlife Branch of the Internal Affairs Department.

The Departmental Officers feel that there are many factors contributing to the idea that the fishing in this area has deteriorated. They have noticed that as the Parks Board has opened new tracks, and provided mag-



View of part of Lake Waikaremoana.

nificent huts and access to scenic attractions previously only accessible by boat, more and more people are visiting the area. Many of these people decided to incorporate a little fishing in their holiday, but are basically novice fishermen and their diaries will give no true indication of the numbers of fish available as they are unskilled, and fishing difficult waters.

The lake levels are very high owing to the hydro-flood gate controls and many of the streams flowing into the lake, where there were pools of concentrated trout, now have up to 12 feet of water over them and these ideal pools are more or less just a part of the lake itself.

Sighting of trout from the newly formed tracks round the lake show there are numerous brown and rainbow trout, but it would appear that a greater amount of skill is required to catch them than when they were concentrated in pools in the tributaries.

It is these angling diaries with their information, when tabulated, which should give an overall picture of the number of anglers fishing the lake and its tributaries, the methods used, the amount of time spent relative to the number of trout caught, as well as data about the species, size composition of the population and dispersal of adult fish from the spawning streams which will complete the research programme.

Once these findings are evaluated the Department should be in a position to answer the claim that the fishing has deteriorated and to know what action, if any, needs to be taken to ensure the future of Lake Waikaremoana as a sporting area.

Right: Photo shows P. Burstall weighing the trout, N. Erwing recording and B. Nichol netting trout.



CONSERVATION NEWS

by JOHN McNAB

Trout Farming Opposition

The Government is adding another hazard to trout fisheries management by wanting to introduce trout farming, stated Dr. Kenneth Morris, of Rotorua, in the "Times" (Hamilton) in late 1970. "Our trout are already subject to a score of hazards, erosion, pollution, water abstraction, encroachment of hydro power projects on their environment and mounting angling pressure.

"To add another hazard would be an idiotic folly," said Dr. Morris.

Dr. Morris questioned the economics of trout farming. "An estimated \$400,000 has been given as the return from this project by the year 1978, but as the Government, under constant questioning from anglers and conservationists, has been unable to support this figure with factual calculations, it is obviously pure guesswork.

"Nor have we been given one single valid acceptable assurance as to how it is proposed to meet the two grave hazards trout farming would introduce—poaching and disease," said Dr. Morris.

Fish Diseases

The Australian Fisheries Council expressed concern at a meeting in Adelaide, in October 1970, at the possibility of serious fish diseases entering Australia. The Commonwealth Department of Health is to be asked to investigate the matter.

A Canberra authority on trout fishing, Mr. John Turnbull, recently expressed concern at "the grave risk of disease spreading to Australia's wild trout because of the proposed operation of commercial hatcheries."

Diseased trout have been found in rivers where hatchery fish have been released. Trout with ulcers in front of the caudal fin and with a type of skin condition evident, have been reported.

Mr. Turnbull praised the efforts of Government hatcheries in controlling disease, but expressed doubts about the attitude and efforts of commercial breeders. "There can be no assurance that commercial hatchery

farmers will always be so careful in removing inferior stock which, after all, represent money to them."

Mercury Pollution

Abnormal amounts of mercury are being found in fish, game birds and water throughout the United States. Evidence of this have been found in at least thirty-three states.

The principal sources have been industrial plants that have released mercury along with other wastes. Like DDT it moves along the food chain from water to plants to fish, birds and humans, the concentration of it increasing as it moves. Even in small amounts mercury can have frightful effects on the body, causing blindness among other things.

Another U Thant Warning

Over a year ago U Thant, secretary-general of the

United Nations, warned that the nations had perhaps ten years left to solve their problems. Recently he again stated that mankind must quickly find global solutions to their problems or "perish—if not with the bang of a nuclear holocaust, then with the whimper of a species and a civilization which ran out of air, water, resources and food."

Quotable Quote

... "I would always put the New Zealander's needs before those of the tourist from abroad. If you look after the New Zealander's for recreation you have a much better base for the prosperous growth of tourism because you have not artificially imagined what the affluent American requires."

—Professor Arthur Ling at the Wellington U.D.A. Conference.



FORESTRY NEWS

Any correspondence concerning this column should be addressed direct to: Director-General of Forests, N.Z. Forest Service, Private Bag, Wellington. Attention — Mr. L. H. Harris.

FIORDLAND SURVEY

You may recall that an account of the problems associated with surveying the northern part of Fiordland by Forest and Range Experiment Station field parties appeared in the June issue of *Outdoor*. Over the winter months (when much of the field work ceases) the data has been analysed and reports on the various facets have been written. It is hoped that these will eventually appear in scientific journals, but, because of the length of time it takes to prepare a paper for publication, internal reports have been prepared. The following is a very brief account of the results obtained from the survey.

The composition and structure of the forests and scrublands were recorded at 1,053 sample points set at fixed intervals along 84 lines, the starting points of which were chosen by a restricted random procedure. Similarly, the composition of the grasslands were recorded at 1,600 sample points within 200 sample areas along 64 lines of semi-random origin. (You can imagine trying to walk along a compass bearing in the Fiordland country!) The data collected were then analysed (by computer) which permitted the objective classification of the vegetation into 13 forest, 3 scrubland, and 4 major and 6 minor grassland associations.

The condition and variations in the condition and the relative susceptibility to damage by introduced animals of each association was determined by analyses of species composition, stand or sward structure, the presence of regeneration gaps, and records of browsing intensity. The density and distribution of animal populations were determined by recording the faecal pellets present on 11,060 sample plots, located among the 148 lines of forest scrubland and grassland plots. A total of 1,261 animals were autopsied, 261 of which were obtained from within the survey area.

Finally, 25 permanent plots were established as datum points for the study of future changes in forest condition

and composition. All of the grassland plots established during the course of the survey can be re-located and used for this purpose.

An indication of the distribution and density of red deer-wapiti populations throughout the principal plant associations is given in the following table:—

Plant Associations	Pellet Frequencies %	Ranking
Grasslands		
<i>Chionochloa crassiuscula</i>	17.3	
<i>C. pallens</i>	20.3	
<i>C. acicularis</i>	10.3	
<i>C. teretifolia</i>	39.2	
Scrublands		
Hebe-Dracophyllum	40.0	11
Senecio	18.1	6
Silver beech-Dracophyllum	9.6	14
Forests		
Silver beech-Senecio-Archeria	16.8	7
Silver beech-Coprosma	10.5	9
Silver beech-pepperwood-Blechnum	18.8	3
Silver beech-kamahia-Cyathea	9.0	12
Mt. beech-silver beech-rata-kamahia	6.8	8
Mt. beech-Mt. toatoa	10.0	10
Mt. beech-manuka-yellow pine-pink pine	1.4	16
Silver beech-Mt. beech-kamahia	13.9	5
Silver beech	11.9	15
Mt. beech	20.0	4
Ribbonwood-Polystichum	32.7	1
Silver beech-ribbonwood-Polystichum	20.5	2
Mahoe-pate-Cyathea	3.4	13

The ranking figures represent the position of each forest and scrubland association on a list of these associations ranked in order of degree of utilisation on botanical evidence alone. In general, there is satisfactory agreement between the two sets of data although

complete agreement cannot be expected because animal use is not entirely synonymous with animal use for browsing or grazing.

The following table shows the pellet frequencies by geographical areas.

Area	Pellet frequency %
Charles-Caswell	22.7
Mid Burn-Loch Burn	21.6
Worsley-Billy Burn	18.9
Glaisnock-Lugar Burn	17.8
Bligh-George	13.4
East Murchisons	13.3
Wapiti River-Doon	13.1
West Murchisons	12.3
Caswell-George	7.9
Transit-Bligh	2.1

These figures indicate that there are over ten times as many animals per unit area of land in the Charles-Caswell area than there are in the Transit-Bligh area.

Data obtained from autopsies, e.g. physical size, body fatness and fecundity, showed that the animals obtained from the areas of higher animal density (e.g. Charles-Caswell) proved to be in very poor condition—condition usually associated with over-population and severe depletion of available food.

The Wapiti Population

The difficulty of identifying red deer and wapiti is illustrated by the following figures obtained from observations.

Total Animals	Wapiti	%	Red Deer	%	"Uncertain"	%
1278	219	17.1	382	29.9	677	53

(It should be remembered that these figures are obtained by skilled field men.)

Because of the difficulty of species identification it is impossible to give anything but a rough estimate of the present wapiti population in Fiordland. From the figures given above, if 17% of the total are wapiti then the probable minimum of wapiti would be 2,500. If one-quarter of the animals classified as uncertain (12.5% of the total) are in fact hybrids and the remainder distributed between wapiti and red deer in the proportion according to observation data (1:1.7) then wapiti would number 4,600. Probably the proportion of suspected hybrids is greater than 12.5% and the number of wapiti in Fiordland is between 3,000–4,000 animals.

The above outline summarises several hundred printed pages—obviously huge quantities of data and results have not been given here. The total forms an objective account of the watershed condition of the northern Fiordland area and it is on these objective reports that the future management of this very beautiful part of New Zealand will be based.

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HUNTING FOR BEGINNERS

The young inexperienced hunter is often disappointed and perplexed at the sight of white rumps disappearing over some distant ridge or into secluded bush at the other side of a grass-covered clearing, always too late to get in an effective shot. This article describes some of the basic knowledge required to overcome such repeated and frustrating encounters with big game.

Assuming that we know where this elusive quarry is to be found, your next consideration will be how to approach it without being seen, heard or scented.

The sensory organs of a deer are highly developed and in this respect, great care is needed in making your approach or stalk to within safe shooting distance.

NOISE:

Deer will quickly seek cover when they hear any noise that is not associated with the surroundings. Before setting out on a stalk, the hunter should always make sure that his personal equipment is securely fastened, spare ammunition, matches, loose change, plastic lolly bags and so on, are all warning bells to the keen ears of the deer. Other factors to watch for are: sheath knives carried at the side where they often come in contact with the rifle, squeaking sling swivels and boots, plastic clothing brushing on scrub, heavy boots on hard packed game trails, tree roots, dry leaves and branches; these and many others are sources of noise which will put game animals to flight.

Deer will often ignore such noises as breaking twigs and falling shingle because they are natural sounds in their environment. On one occasion the author while hunting in Fiordland, spent half an hour rolling stones down the mountainside into the middle of a herd of wapiti. These stones which were small sometimes landed within a few yards of the animals but they did not trouble to look, being quite accustomed to the sound of falling shingle in the area. A few moments later the noise of a rolling stone was heard below some bluffs on the other side of the ridge. Unlike the wapiti, the author was suspicious and set off to investigate: two red hinds suddenly appeared from behind the bluffs . . . a quick look over the edge revealed a handsome fourteen point red stag which now adorns the wall of the author's home.

The experienced hunter always investigates strange noises. These are often found to be caused by birds scratching for insects, but on occasions it may be a deer foraging for food. It may also be another hunter in the vicinity, so make sure before you shoot.

The agitated calls of birds may also indicate the presence of deer in the area. They also indicate the presence of the hunter, a fact which can some times be very frustrating but is part of the experience in hunting.

In conclusion of our remarks on noise, do not be fooled into believing that the sound of wind in the trees or the rush of water in the creeks will muffle your approach. They help to some degree, but the click of a rifle bolt or clink of an iron shod boot on stone will still be heard by the sensitive ears of the deer.

SIGHT:

The problem of being seen by the quarry is of course dependent on the line of approach you decide upon, and

governed by the direction of wind, you must therefore make the best use of whatever cover is available.

Avoid being silhouetted on the skyline and when the sun is behind you, beware of long-reaching shadows.

It is generally believed that deer have very poor sight. However, the author from experience accepts that they have reasonably good eyesight.

SCENT:

The third and most important item is scent, on which the game animal relies most for self protection. To avoid being scented the hunter must pay particular attention to wind direction; this is not a simple matter of knowing the general direction in which the wind is blowing, but of knowing how and when it may change.

As many hunters know the wind can be contrary, depending on the area, general weather conditions and time of day.

Basically, the movement of wind is governed to a large degree by air temperature and if you keep in mind that hot air rises to be replaced by colder air, you will soon learn to understand the sudden changes in wind direction that are so often experienced when hunting. In each hunting area, wind behaviour can vary. Careful observation of direction and time of change should be noted (it is a good idea to record this information in a notebook for future reference) during your first trips into an area. In subsequent trips you will find this information makes your hunting successes more numerous.

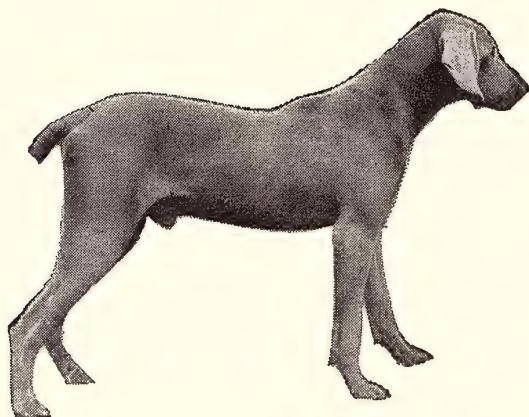
For obvious reasons we cannot give you detailed descriptions of wind behaviour in all areas, but the following will serve as a general guide.

In reasonably defined valleys, in early morning wind direction will be down-valley, even if there is no apparent wind there will still be a steady downward movement of cold air. This will continue till 10 or 11 a.m., the wind will then change to the opposite direction due to the upward movement of warm air which has accumulated in the valley floor as a result of the general rise in day temperatures. During this change you may experience violent gusts of wind from various directions, but this will settle down to steady up-valley winds.

If you happen to be on a ridge during this change you may find the wind blowing from each side. In late afternoon you can expect a complete change in wind direction again between 3 and 6 p.m.

A careful study of the wind behaviour in your hunting area can determine where and when you hunt a particular area; e.g. if you are stalking up-valley in the early morning you must get within range of your quarry before 10 a.m., from then on he will be inhaling what is commonly known as B.O. — consequently you should not be surprised if he makes a hasty departure.

If you anticipate a wind change whilst stalking and find that you can not get within range of your quarry before the expected change, a detour to left or right may save the day.



DOGS



by

JOHN GREENWOOD

RABBITING DOGS

Since the rabbit (*Oryctolagus cuniculus*) was first introduced to New Zealand in 1858 and rapidly bred to plague proportions, man has hunted him, using dogs as a basic assistant, and indeed as the major way of "getting a shot" during daylight hours. This month we will have a look at the dogs used for rabbiting, both by rabbiters and by private individuals, and some of the ways in which they work and are worked by their owners.

I suppose the greatest number of dogs used for rabbiting are crossbred dogs of all shapes and sizes, but before we look at these variety dogs, let us firstly look at some of the breeds which are, or have been, used by rabbiters, either as rabbiting dogs in their own right or as breeding stock to obtain suitable crosses to fill the rabbiting packs.

The most likely dogs to be used in rabbiting packs are the recognised Gundogs. Cocker Spaniels, small and fast-moving, are an obvious first choice. Keen, tireless workers, they will quickly learn what is required of them. The Springer Spaniel, although a little larger than his Cocker cousin, is also a common and worthy choice for a rabbiting pack. The Irish Water Spaniel must also have been used in some rabbiters' packs.

The Retriever breeds, Labradors, Curlies and Golden Retrievers, have all played their part. Almost every rabbit pack has a retriever of some sort and these are an obvious choice. The Curly has been very popular in this situation, but does not really have much advantage over the Labrador or Golden Retriever.

The Pointing and Setting breeds have not found much place in rabbiting packs, although the Short-haired Pointer, of recent years, has been used with some success. Most pointer-setter breeds are far too large and slow-moving in cover for rabbiting work. However, that is not to say that they cannot hunt rabbits. They can and will, and in certain circumstances could be of much use. For instance, used alone, in light tussock cover to point or set the bunnies, and allow for close shooting.

Terriers are always in demand for rabbiting packs. They are small and move freely and easily, and as such are very good, especially in hunting cover. The Smooth and Wire-haired Fox Terriers are perhaps the most popular. Australian Terriers should have a place in rabbiting packs. They were probably bred for rabbiting as much as for any other purpose, and I know they can hunt. The Scottish Terrier, along with the Kerry, Cairn, and several others of the small terriers would be okay too, but are bred in New Zealand only for showing and may be hard to acquire. Likewise, the Irish Terrier and Airdales would make excellent rabbiters if they could be acquired. The Airedale, in particular, is a fairly large and solid dog, very hardy and with plenty of guts.

The scent hound group of dogs are all potential rabbiters. The most likely, though, is the Beagle. These lovely little hounds make excellent rabbiters, and will work all day with a will that puts other dogs to shame. The Basset is not at all common in rabbiting packs, but would make a very good rabbiting dog. The Harrier or Foxhound is also a good rabbiting dog, but is not used to any extent, except for cross-breeding purposes. The diminutive Dachshund is also good, but is used chiefly for cross-breeding.

The sight hounds are used to some extent in open country. Barbed wire fences are murderous to these fast dogs, and so limit their use. Greyhounds are the main ones, the Afghan and Suluki, etc., being unused. Whippets are very popular, particularly in some areas.

Ordinary sheep and cattle dogs are sometimes used, and these, surprisingly, are often quite good. The Lurcher is used in some districts, and the Corgi is occasionally used. Various other breeds may be used in isolated instances, but these are the main ones.

The majority of dogs in rabbiting packs, however, are cross bred or mongrel bred dogs. We will define cross bred as being with one parent a pure breed. A mongrel, on the other hand, may have several breeds in both parents. Crosses may be made between almost any of the above breeds, and may or may not turn out okay. In most instances, a first cross, i.e. a cross of two pure parents of differing breeds, will turn out pretty good. A cross of one pure parent with a cross dog will also usually turn out pretty well, but a mongrel, i.e. two cross parents mated cannot be relied upon to produce offspring with consistent working qualities.



NEWS-BRIEFS:

Red Deer

Red deer may be imported to increase New Zealand game farm herds. It appears that noxious deer are not good enough. The mighty dollar speaks again! Will it deprive us of our hunting in the future? Are we going to allow a complete takeover by selfish inconsiderate exploitation of those who hunt for monetary gain? The answer is in the hands of the sportsman.

Through sound game management, American deer herds now exceed 15,000,000 from which hunters take over 2,000,000 each year. A few years ago they were in danger of extinction. Our game herds can be saved, but only with the united efforts and support of all genuine sportsmen.

Stinging Nettle

Two hunters from Hastings became very ill after an encounter with a patch of stinging nettles, while on a hunting trip recently.

Stinging nettles are found throughout a great part of bushlands. The most common being the Dwarf Bush Nettle (*Urtica incisa*) which grows about 18 inches high, leaves up to 1½" wide x 2" long (illustration 1).

The next most common and probably most dangerous is the Tree Nettle (*Urtica ferox*), a shrub reaching nine feet high and sometimes in a low widespread shrub form, usually found in open gully heads or secondary growth. Leaves up to 1" wide and 5" long (illustration 2).

Any extensive contact with this nettle can result in an extremely irritating rash which can last for several days. The victim may be overcome, become very ill or in extreme circumstances may die from the effects of the nettle sting.

In both species, the size and shape of the leaves may vary; the stinging hairs are found on both leaves and stems. On contact with the skin, these stings break off and inject a fluid.

The symptoms of serious infection are nausea and

giddiness. Medical attention is advised as soon as possible.

(Two Wairarapa hunters who were unfortunate enough to come into contact with stinging nettle recently, advise that relief can be obtained by rubbing dock leaf over affected area.—Editor.)

Queries

In answer to a number of queries, the bush shelter described in the September 1970 issue of 'Outdoor' is a "Windtest" product.

We have received requests for articles on various other aspects of outdoors sport and equipment etc., these will be published in future issues of 'Outdoor'.

All queries should be sent to N.Z. Big Game Hunters Association, Information Service, P.O. Box 46, Tuakau, South Auckland.

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The cocker spaniel — an obvious first choice as a rabbiting dog.

Many rabbiters have, in the past, mated their best cross-bred bitch with another rabbit's cross-bred dog and have been disappointed in the results. Some have even got down to believing the other's dog not as good as he thought, when in actual fact it is the genetical mix-up which has resulted in unreliable results of this mating. Undoubtedly some of these mongrels may turn out okay and no doubt some readers will be able to quote instances, but the most consistently good dogs will be first crosses — not mongrels.

I once had a little bitch — I called her Kim — who was from a bitch which was a Fox Terrier-Pomeranian cross. Her sire was a pure Cocker Spaniel. She stood about six inches high, and looked like a miniature Border Collie, but could she hunt. Rubbish and holes were her long suit, and she could outrun many a larger dog, not in speed, but in stamina.

In a rabbiting pack, the dogs are seldom all of one type. There are small and big, fast and slow, hole dogs and retrievers. These are mixed in, in various ratios depending on the type of terrain you work, and type of dog you think is most necessary. Small dogs are used to get under cover and flush the rabbit. Most, although not all, rabbiters prefer that these small dogs bark when on a scent so as to give warning of a rabbit's probable appearance.

These small dogs are often hole dogs, i.e. will follow a rabbit to its hole and call attention by barking to this fact so that the rabbit can go and gas the rabbit with cynogas or chloropicrin. Hole dogs are an absolute necessity in a pack and the more dogs which double as hole dogs the better, as these will account for many rabbits. A hole dog should also be good at finding and marking stops, i.e. the nesting hole of the rabbit. A good hole dog will only call attention to a stop in which young rabbits are nested and will ignore partly finished or abandoned holes.

Fast dogs are not used in every pack. Some rabbiters

believe that fast dogs mean fast rabbits, and vice versa, slow dogs make for slow rabbits, rabbits that hop quietly from cover and stop and look back to see if the dog is following. The fast dog, however, is usually a sight hound or sight hound cross and can catch a lot of rabbits, especially if held outside the cover until flushed by other dogs. Two fast dogs should be worked together as one can then turn the rabbit and allow his team mate to make the kill.

A retriever is almost a necessity in a pack, to bring back wounded rabbits and also dead ones as confirmation of the kill. The dog used for this purpose need not be a recognised retriever breed. A Cocker Spaniel, Springer, or any dog at all may be given this task. I have even heard of a Corgi being used as retriever in a rabbiting pack.

How many dogs do you need in a rabbiting pack? This is up to you, and will probably be dictated by the Board for which you work. Packs have been known of 10, 20 or more, but I doubt the necessity for all these. Four or five dogs, perhaps seven or eight, are ample, and all one man can hope to watch at one time. In many ways, as many or more rabbits can be shot over one quiet dog than over a pack. A pack should have at least one dog capable of retrieving, one hole dog, and the rest can be in just about any ratio you like. You would probably double up the work with some dogs, perhaps a retriever might also be a hole dog. In fact, all the dogs in the pack should preferably be hole dogs. Probably the best way to get hole dogs is to dig out "stops" and divide the spoils (young rabbits) between the dogs. You will soon get a pack of dogs all of which are hole dogs.

The training and working of rabbiters' dogs is not difficult. About the only training necessary is the sit or down, and the heel. It is absolutely necessary to have the pack under control. Rabbiters may have the right to go onto land, but that is no reason to take on unruly dogs. When lambing time comes, hogget country and

A GREAT TEAM



Mr. G.J. Brennan and 'Dick'

A New Zealand record has been set by Mr. Garry Brennan of Feilding and his champion sheep dogs. His current champion, "Dick", has won four National Sheep Dog Trial Championships and five North Island Championships in the last five years and has notched a total of 97 wins to date. A previous champion, "Bruce", won 101 trials, including two National Championships and four Island titles. Mr. Brennan

and his dogs have now won more National Championships than any other competitor.

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dry sheep country can still be worked, provided you have got complete control of your dogs, and can call them off a rabbit or hare which you cannot shoot, and which is going amongst lambing ewes.

To work the pack you just take the pack to where you want to start and walk **slowly** along. Now when I say slowly, I mean slowly—very slowly, so as to give the dogs time to thoroughly work the ground over. Call back any impetuous dogs which are getting too far away and you are in business. A little experience will soon teach you the best place to stand so as to get a shot as the rabbit breaks cover. I cannot tell you where or how, only experience can, because what might suit me may not suit you at all. You need to learn to think like a rabbit, and work out where he will most likely go. If you fill in all the holes you come to, you will save a lot of cartridges too, as a rabbit going to a hole you have filled in is as good as dead.

The dogs will get him as he tries and retries to get in that hole. The dogs should always follow the rabbit out of cover and to wherever he is going. You will have to follow, but do not forget to go back to where you have left off, as the first rabbit probably had a mate and may have four or five cobbles as well. The dogs will tell you when all the rabbits are gone, although they are not infallible in this, and it is always worth working ground at two or three different times of the day in order to catch the rabbit out. In hot weather dogs will tire quickly and will not do perfect work so start early and knock off early. Work some other method in the heat of the day.

As I see it, most rabbiters' mistake with dogs is in not giving them enough time to become good dogs. Rabbiters will acquire dogs from various sources, use them for one or two days, and then shoot them because they were no good. Of course, if they chase sheep or something, fair enough, but shooting dogs for not hunting with less than two months trial is, I think, being downright trigger happy.

From a rabbit's point of view, a dog is a pest — just get out of his way. But what a pest. If a noisy pack is making a lot of noise outside cover, he is not going to come out. He will stick to cover or go to ground and it is a good dog who can shift him. I have known rabbits stay in a heap of burning rubbish and die rather than face a pack of dogs. Perhaps this is the best indication of what Brer Rabbit thinks of a rabbiting pack.

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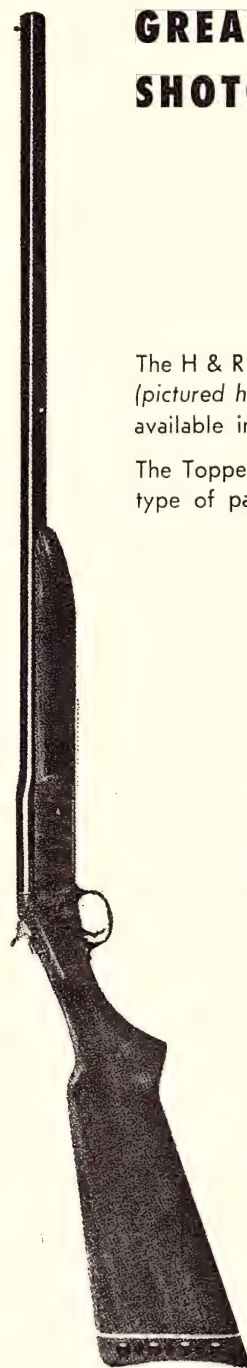
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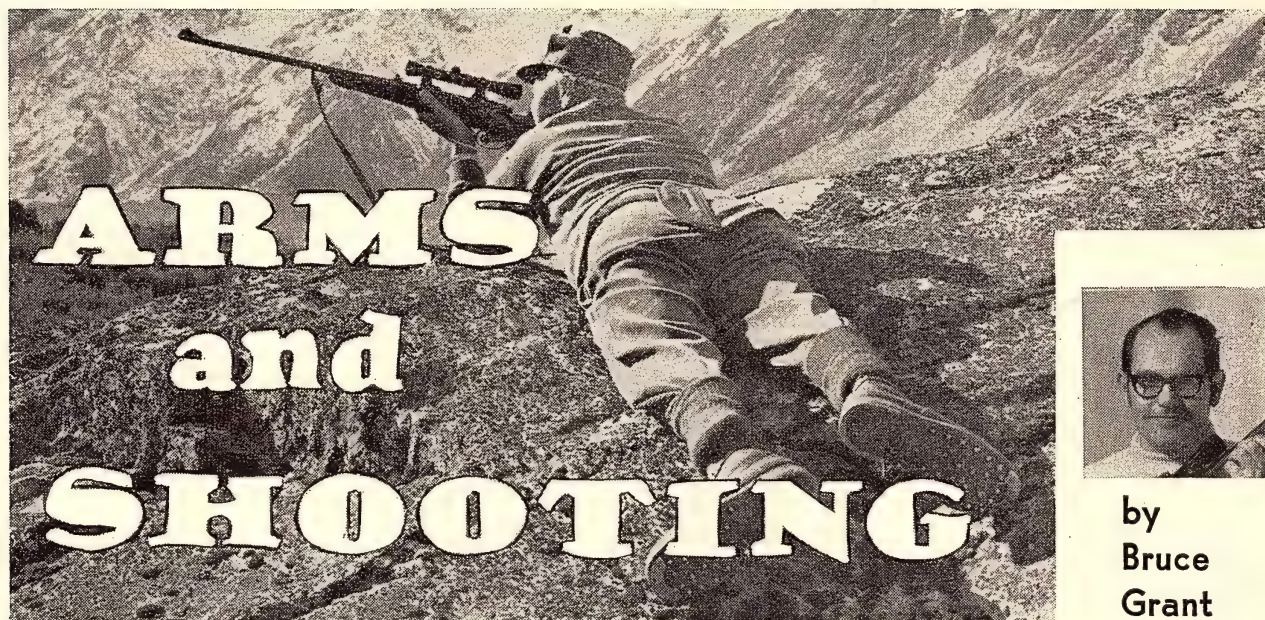
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by
Bruce
Grant

OH DEAR! DEAR DEER

Deer, and other introduced game animals have always constituted a 'problem'. Initially there were difficulties of importation, establishment, then control and extermination. All of these are old hat. Today, deer, tahr and chamois offer a conundrum more involved and lacking of a single answer than any which has gone before.

Okay . . . what has this to do with an Arms and Shooting column? Just this: my aim is to help shooters to arm and shoot for this kind of animal. When such shooting becomes restricted to the financially fortunate who can afford to pay for an animal to be planted virtually on the muzzle of the rifle, this column is redundant. Without free access to game in shootable numbers there can be no shooting for the average hunter.

I have a brochure promoting shooting in the Carpathian Alps of Roumania. In it I see that you can shoot a stag for as little as £124, but for real trophy quality you pay at least £1,000, while a miss will set you back a mere £41/12/0. Similarly, a fair fallow stag is listed at £150-£200, chamois around £100 and wild boar £40, a little less than a clean miss of a Carpathian Stag. In the light of these figures we have been onto a very good thing without knowing it all these years. After all, we are on the right side of the Iron Curtain for this kind of thing and since this is the only place where Himalayan Tahr are accessible, we might even be able to set our own price on the trophy.

This is the international worth of our sporting heritage, a heritage which has cost the country much in abortive attempts at control, and by way of meat exports brought back a little. In time, with proper management, these herds of ours could again be made to equal any others in the world so far as trophy potential is concerned.

It would pay to sketch in the background both to obtain perspective and to see if we can learn anything from the past which could help us in the future.

The period of introduction extends from late last

century till the 20's and early 30's when the deer enjoyed the status of protected animals. At the outset poaching was a real problem, probably accounting for the failure of the South Island introduction of Sika deer. Runholders showed a very real interest, assisting the Acclimatisation Societies with establishment, a striking contrast with later attitudes on extermination. When shooting became available, it was for a privileged few under a licence system which restricted both the area and the number of animals shot. During the 20's, with deer firmly established, the quality of the trophies obtained made New Zealand the best place in the world to hunt deer. However, that is the rosy side of the story. Control of both numbers and quality was well beyond available resources of money and manpower. In the broken, bush and tussock clad mountains and valleys it remained so, until the coming of the helicopter.

Between the period of establishment and the helicopter comes the era of attempted extermination, carried out on foot by Government paid "cullers". Although millions were spent on this effort, it was a complete failure. Numbers actually increased. Such places as the Landsborough Valley, once famed as great trophy areas, became over-populated with consequent deterioration in body and antler size. The territory of the herds still increased. This remarkable population explosion has been blamed in part on the respite afforded by the absence of cullers during World War II. This may be partly true, but it was also the time when skin prices reached levels never approached since, despite devaluation and inflation. Shooting pressure was maintained because of this. My own father took thousands of hides during this period, without making any lasting impres-

sions on the numbers in the areas he shot.

Then too, deer and other introduced animals became scapegoats, were blamed for all the bad things happening to the high country. They were found responsible for all erosion and damage to the native flora, ignoring the relentless, systematic work done by snow, ice and storm. Significantly, the areas hardest hit by the evil of accelerated erosion were territories burnt over and also grazed by productive, wool and meat producing sheep. Few thought of blaming them, or the farming methods used.

Certainly, the effect of a browsing animal like red deer, in large numbers, on the small scattered patches of bush in tussock country east of the main Alpine Divide can be devastating, but this should really be classed as a problem of over-population, not one demanding complete extermination.

Often overlooked is the fact that deer have thinned out excess forest undergrowth, making virtually impenetrable tracts of bush accessible to Man for his enjoyment, and also affording forest giants of the future a chance to grow untrammelled by choking undergrowth.

Regardless of the rights and wrongs of the case, and current research indicates that the bush can tolerate a limited game population, the lesson of this era is that despite massive injections of public money, control of animal numbers consistent with herd improvement and maintenance of the environment cannot be achieved in New Zealand's terrain by shooters on foot. This does not rule out the possibility that hunters on foot could exterminate a depleted remnant of a herd enfeebled by aerial bombardment to a state of near extinction.

Development of overseas markets for venison and the arrival of the helicopter to capitalise on them has answered the problem of control. These have also saved the native vegetation from more permanent harm. Rightly, helicopters were welcomed to the back country. Equally correctly, chopper operators have been attacked by conservationist groups and the farming community for unprincipled acts of slaughter, motivated by hunger for profit.

Recently, through the generosity of an operator, I had the opportunity to share in a helicopter operation, part of a Forest Service 'Cull'. The flight upriver was a real thrill. Country worth hours of foot-slogging was covered in a few minutes. Then deer were spotted. The chopper closed in rapidly on the running animals for the kill. Despite desperate attempts to escape, they were all picked off at a cost of about three shots apiece. Shooting from a moving platform at a moving target requires skill of a very high order. However, it is soon apparent that, barring miracles, the animals have no chance of survival. It is business this execution, not sport, and a bloody business at that, as the gutter leaps out of the aptly nicknamed 'Chopper' to work furiously on the still kicking carcasses. Time in this game is indeed equated with money.

It is easy to see the meat hunter's point of view. In good weather, the work is arduous, hours long, the machine expensive, and the risk to life and limb high. If the weather is unsuitable, there can be no flying and no profit. Therefore, the men involved expect adequate recompense when they fly. A shooter, paid on a contract basis, can clear \$700 in a good month.

However, during my visit, a Forestry shooter flew on each trip, and the Service was paying hire for search and shooting time at a rate of \$2 a minute. Time used in carcass recovery was flown at operator's expense. In practice this works out that the Government pays for the outward flight, locating and shooting the game, whilst the chopper outfit pays for the pickup and the flight back. On tahr and chamois trips the plan is to shoot enough deer to make a load for the return journey, then continue to shoot the alpine animals so difficult to recover.

In the course of a day I counted 56 deer, seven tahr and no chamois: the return for eight hours flying. Carcasses were large, in good condition, the hinds all carried slinks, and the antlers in velvet showed strong growth. This improvement in the animals, plus higher prices for venison, compensate for the reduction in tallies, making helicopter operations still profitable. If helicopter killing has been responsible for the reduction in numbers, it has equally been responsible for the improvement in quality.

Those carcasses stretched out on the tussock river flat represented nearly \$1,400 by my guess, which brings me to the next point. I estimate that the eight hours of flying that day, worth \$960 at normal hire rates, could be divided into say five hours for the Government and three for the recovery. The return on the flying would therefore be around \$2,000, a clear \$1,000 profit over and above a normal operating profit.

It is reassuring to learn that the helicopter companies are investing some of these profits in the establishment of safari outfits up and down the country. This brings us right up to the present moment.

All aspects of wild game hunting have become worth big money. Safari outfits charge about \$100 a head. With the slump of wool prices, runholders have found that deer, despised for so long as pests, are potentially more profitable than sheep. While reducing flocks they are building up stocks of deer as much as possible, what I call unofficial farming. Unchecked, this trend will carry on to its logical conclusion, game in moderate numbers available to overseas tourists — at a price! Meanwhile the average Kiwi in whose country these proud animals are raised is denied access to Crown Land, to shoot animals which are Crown property.

As I see, it there are four groups involved:—The Forest Service, because the Government has made game animals its responsibility; the meat hunting companies, because the game is their livelihood; the runholders, because they control access to game areas; and the conservationist groups, notably the N.Z.D.A. among others, because they are the watchdogs of the ordinary citizen's interests. Runholders and chopper outfits have been discussed already. Basically their motivation is the same.

The Forest Service is the government agency in the matter. Its prime concern is the well-being of the vegetation covering the land and this has coloured its thinking on the game problem. Besides, inertia has made the Service slow to respond to changes in circumstance. There is probably an optimum number of animals in relation to available pasture regardless of species.

Departmental attitudes towards deer, tahr, chamois

and sheep have been changing slower than the proportions and numbers of these animals in the high country. Again, when a particular control operation was decided upon, a minor blunder was committed in not informing runholders that deer would be taken as well as tahr and chamois. However, the major blunder was not to take full control by insisting that wherever possible carcasses were to be recovered and sold by the Service to defray the cost of operation. On the strength of this perhaps the hire rate would have stood an increase and the shooting made selective rather than profit orientated. In addition, fewer carcasses would have been left to pollute the headwaters of the backcountry rivers.

There is encouragement to be gleaned from my conversation with Forestry men in the chopper. Schemes are contemplated which amount to genuine game management. These include winter feed lines to establish game numbers and condition, followed up by selective culling from commercial helicopters where required. Carried out in the spirit which the words conveyed would amount to a deerstalker's dream.

The N.Z.D.A. and similar organisations are made up of highly individual, well intentioned men with high ideals. The trouble is that real conditions frequently make such ideals unattainable or inappropriate to the situation. Two instances which particularly bear this out are the "no choppers under any circumstances" approach and "no selling of meat to the freezers" attitude. Without the helicopter, the game management schemes so fondly nurtured are inapplicable to New Zealand

conditions. As already noted, control on foot has been proved impossibly expensive. The deer have the odds stacked too far their own way.

In the light of this, the 'no sale of meat' attitude is absurd. Alongside helicopter tallies the number of carcasses sold to the freezers by private weekend hunters is insignificant. Some extremists even advocate leaving the meat on the hillside for preference. This is entirely out of line with mainstream conservationist thinking. A man carrying meat out is unlikely to shoot more than one who shoots an animal for sport, then continues the stalk unencumbered, returning later if the trophy is good enough, finally abandoning the meat to putrefy, having obtained enough for his requirements from another carcass.

The time to consider the ethical problems is before the beast is shot. Then questions of whether you have enough meat or whether it is a worthy trophy are relevant. The animal can be allowed to live. Once dead it is a carcass which can only be disposed of in the most useful manner the hunter can think of. It may be that it has to be abandoned because of considerations of terrain, time of day, the weather, or remote locality, but the truly ethical hunter will always take what he can and dispose of it as best he can.

Having covered the field, the next step is to admit that while the parties involved each has its faults, each has a stake in the future of the animals. It is also clear from press reports that there is precious little co-operation between them on the issues involved. I suggest



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that now is the time for these groups to come to the conference table, each with an equal voice, and each prepared to compromise a little, to cut the cake in a civilised manner while there is yet time.

Such a wildlife council would have plenty to do: to match recreational needs with environmental requirements; to determine a new status for game animals more in line with their value to the nation; to guarantee free access to New Zealand citizens to their game heritage; to co-ordinate the safari industry catering to overseas visitors wanting trophy animals and paying the full price for the privilege; to regulate culling operations from helicopters on a tally per block system; and placing restrictions on the number of animals shot from ground or air in accordance with good game management principles.

This would be an official body with full representation from all the interested parties, capable of handling the issues in the national interest. It could be financed on the money at present being spent by the Forest Service on control, plus returns from sale of the carcasses taken on annual culls.

I sincerely believe that provided a satisfactory balance between commercial and conservationist interests is achieved, and provided these interests are prepared to abandon present untenable attitudes, such a body would work to the benefit of everyone affected in the present anarchy.

QUESTION & ANSWER

Two correspondents to thank this month, Malcolm Smith and Mr. McCaw. Both these readers sent stamped envelopes and have already had a personal reply to their queries.

The Bockbuchsflinte or Combination Gun. This marriage of shotgun and rifle barrel one above the other is a German inspiration. The correspondent notes the obvious limitation of the single shot from each barrel, asking for comment on one of these guns using 12 gauge and 7 x 57R cartridges as a sole weapon for rabbits and deer.

(1) You nearly always carry round a surplus barrel in New Zealand. It is unusual to hunt both big and small game at once. The gun tube can be loaded with a rifled slug for close work on big game, but this has limited effectiveness as second string.

(2) Because the gun has a dual role, sighting provisions are restricted to open vee and blade, a disadvantage so far as the rifle barrel is concerned.

(3) A minor one this. Under sustained rifle fire the cold shotgun barrel inhibits expansion causing barrel warping with change in impact.

(4) The 7 x 57R cartridge is a rare bird and is only listed by two major companies, RWS and DWM. Consequently supplies are going to be intermittent and expensive. Factory loads are available with a wide variety of projectiles in the following weights: 103, 116, 139, 154, 162, 173 grains.

(5) As loaded the performance appears to be very close to .303 in corresponding bullet weights.

(6) If handloading is contemplated, any 7mm. projectile can be used but these cases are frequently Berdan primed. The only cases which can be reworked to this calibre are the almost equally scarce 8 x 57 rimmed version.

(7) As these guns are registered as rifles they can be taken onto Forest Service land where shotguns are normally prohibited.

(8) This is a gun for the man who relishes the ultimate challenge in his shooting and is prepared to accept the consequent reduction in his bag.

Fitting a Scope to a .22 Browning Autoloader. These rifles are takedown models and suffer from the common fault of this type of rifle. There is relative movement between barrel and action which upsets accuracy if the sight is action-mounted. Solution is to screw the mounts to the barrel. Weaver and Browning offer such mounts.

Fitting a Common Scope to .22 and High Power. This is theoretically desirable and economic. However, even 'detachable' mounts do not guarantee absolute retention of alignment if the scope is only removed and replaced on the same rifle. Hence it is good practice to target the rifle afterwards to check sight adjustment. The additional problem if the scope is to be fitted to two different rifles is that the reticle will certainly require considerable adjustment to suit the individual characteristics of the two weapons. The only system available that will pull this trick off consistently is the Bausch & Lomb Custom setup (revued in January 1970 *Outdoor*) which has all adjustments built into the bases. This system is not yet readily available in New Zealand.

Suitable Scopes for .22. Cheap scopes are available with $\frac{3}{4}$ -inch tubes which appear to satisfy the market. However, I have found that the more expensive Japanese models with 1-inch diameter tubes offer decisive advantages in this role as a result of more rugged construction, more rugged mounts, wider field of view and better definition. 4X is my preference for magnification.

Suitable Scopes for High Power. An American or German brand will bring dependability. Weaver, Lyman and Pecar are good reliable scopes. Bausch & Lomb, Redfield, and to some extent Leupold, are getting into the luxury class. Avoid varipowers. Frequently point of impact changes with the power. Users I have talked to often ruefully admit that they usually keep them set between 3 and 4X. Finally, this option brings one more train of moving parts to go wrong, and they not infrequently do. The most versatile reticle patterns are the flat-topped post with crosshair and the tapered crosshair, because they allow good shooting in most light conditions.

Information on .22 Browning Autoloader. John Moses Browning 1855-1926 was a prolific designer of firearms, especially automatic weapons. His brothers were also firearms designers. Today the Browning Arms Company is a distribution network owned by F.N., and the Browning name is given to arms, made by F.N. and others, which this organisation sells. As far as I can establish the .22 automatic is actually one of John Browning's designs. They are made by F.N. at Herstal, Belgium, and a very similar rifle was at one time produced by Remington. It is a fairly typical inertia operated action, bolt mass holding the action closed until after the bullet is gone. Particular attention has been paid to detail refinement and finish. It is very easy to strip and no tools are required. There are two basic models, one for long rifle bullets and one for shorts. These are obtainable in several grades of finish.

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If you have a query for this column, address it to: Bruce Grant, c/o. P.O. Box 317, Timaru.

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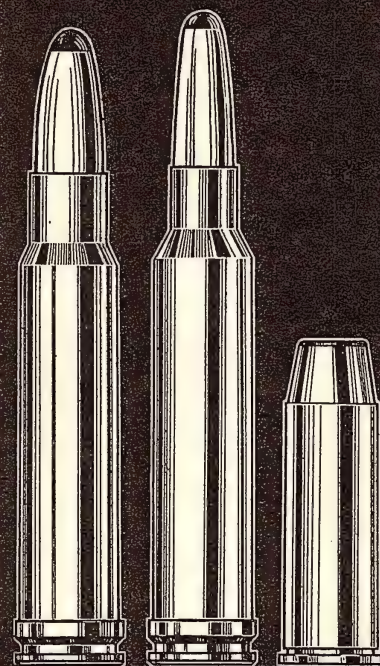
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STALKING & SPOTTING TROUT

by
Tony
Orman



One of the best pieces of equipment an angler can have is a pair of polaroid glasses. I was never fully appreciative of their value until an incident on the Mohaka River caused me to realise their worth to the trout fisherman.

There were three of us on this particular day, and we were walking downstream to fish some likely looking pools. At this point we were perhaps 30 or 40 feet above the river, when I glanced down into a pool and saw two good-sized fish. When I tried to point the trout out to my companions they could not see them.

For an instant I was puzzled, and then I suddenly realised the essential difference between us was that I wore polaroid glasses. To cut a long story short, one of them eventually clambered down the bank and landed a beautifully conditioned five and a half pound trout. On that day seeing and knowing that brown trout was there meant the difference between catching and not catching the trout.

The big advantage in using polaroids is that you can spot your fish, and this is a tremendous advantage over fishing blind. Most of New Zealand's waters offer good opportunity for spotting trout with polaroids. Once you have spotted your fish you can then plan your strategy and presentation, and even watch as the fish takes your fly.

Yet just because you have a pair of polaroids, there is no guarantee that you will be able to spot trout consistently. Spotting trout is like spotting deer. It needs a practised and an observant eye to find what you are looking for.

Spotting trout is like deerstalking. Just as a good deerstalker looks for part of the deer rather than the whole animal or perhaps just a suggestion of something out of the ordinary, so too must the angler in looking for trout.

A careful examination of a pool may eventually reveal a trout or two, but it may only be the movement of a tail: a brief flash as the fish turns to take a nymph or the movement of the fins.

Nature is not so foolish as to make her creatures easily discernable in their environment. They tend to blend with their surroundings and to make the task of spotting trout more difficult, distortions of the surface by the current often occurs.

When you do encounter those distortions of the surface by current, particularly on back-country rivers, remember that those distortions are not consistent. They change and weave and every so often there will be a moment when the distortions seem to part and give the angler a clear vision to the bottom. So patience is a virtue they say, and especially in fishing. Take your time in spotting trout and do not be in a hurry to move on.

Polaroid glasses give the angler better vision by cutting the surface glare and reflection. A sunny day is obviously best for polaroids, but they can be an asset

on cloudy days too. I can remember a day on the upper Buller when a westerly clouded the sky and rain splattered in the wind, yet for some reason visibility was exceptionally good. Perhaps it was the angle of the light, but I had a very enjoyable two hours fishing upstream with a nymph, taking a good trout and losing two others in the strong flow of the Buller. Significantly and satisfyingly, all of those trout were spotted.

The skill required in spotting trout was illustrated to me one day on the Motueka River, in Nelson. It was a sunny morning and we began fishing about 10 a.m. The water was gin clear, yet I had difficulty spotting the fish. My companion, Jim, had no difficulty. In a short space of time he had spotted and stalked two fish. Both fish took his pheasant tail nymph instantly when he presented it to each of them in turn.

As he removed the nymph from the jaw of the second fish, I asked him the secret in spotting these trout. It turned out that it was merely a matter of looking for a hint of the trout's presence rather than the whole fish. Those brown trout were exceptionally hard to see against the stones and in the rippling runs where they were feeding, and in addition, success in spotting them also demanded a very careful and concentrated scanning of the water ahead.

An upstream approach is the best strategy with polaroids. Pick your way carefully, searching each pool and likely spot with infinite care. Remember too, the habit of the brown trout of often lying right on the edge and feeding.

When I do spot a fish, I try to take my time. It is often worthwhile to watch the fish for a minute or two to try to discern his feeding habit.

Angling in the back-country offers optimum conditions for trout stalking. It would take a strong and eager man a lifetime to explore the many miles of waters in New Zealand's mountain country. The going is rugged, the walk in may be long and arduous and the river may be a mixture of cool clear rushing torrents and deep clear holes. But if the physical effort is considerable, then there are compensations in the quality of the angling. Stalking trout is the very best of fishing and it can be enjoyed at its best on a mountain river.

Feeding trout can be found in a variety of positions and like any aspect of trout fishing, strict rules cannot be laid down. Yet there is one case of trout feeding behaviour where there is, at least, a certain degree of consistency in the trout's behaviour. Brown trout, especially in sluggish streams or in lakes, will cruise seeking food. It is a fact that Nature's creatures are habitual. A brown trout will cruise, but he will usually follow a regular beat.



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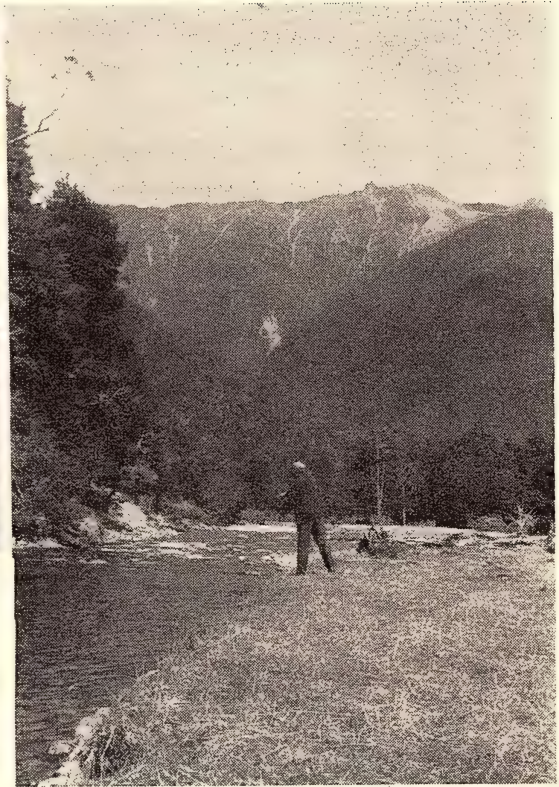
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Above: Two typical Motueka River trout.

Right: Fishing a dry for brown trout in Travers Valley, Nelson.



It is possible in many cases when fishing for browns to make a note of the fish's cruising path. When the fish has continued on his beat, sneak into the position and wait. If you have noted his course you will know where to look in the pool for the fish cruising the back straight. You can either put your nymph out to rest on the bottom, or you can cast as the fish approaches. Either way, when the brown nears your nymph, twitch it and he may well grab it. You can see every movement and reaction of the fish, the quickening of his pace as he hurries to investigate, the take, and in some instances the amusing horrified expression as you tighten.

In looking for fish whether it be by a slow stream, along a lake edge or on a typically running New Zealand stream, slow movements are advisable. Quick movements are alarming to any wild creature and just as it is with deerstalking, so it is with trout stalking. Take your time, move slowly and search carefully.

Sometimes a trout will catch you by surprise as he suddenly cruises out from under a bank or willow. Freeze instantly and the fish may well continue his beat undisturbed. You can be almost certain that some time later—perhaps a couple of minutes or a quarter of an hour—he will reappear in approximately the same place. It all depends on the length of his beat.

In spotting brown trout cruising, it never ceases to impress me the need for patience. Often I have looked into a good looking pool knowing there probably would be a fish in it, but gradually getting impatient at the lack of a visible fish. Several minutes may have passed and I have been on the point of moving on when a cruising fish has suddenly materialised, slowly but systematically cruising his domain in search of food.

These cruising browns are, in most instances, not too

fussy. A smallish nymph pitched six feet in front of them, often gets a response. A cruising fish is not likely to be selectively feeding as a trout stationary, but feeding in a rapid.

The other day a five-pound brown disclosed a diet of two freshwater crayfish, a weta, a black terrestrial beetle, a cicada, mayfly nymphs and water snails. The fish was cruising and took a pheasant tail nymph with not the slightest hesitation.

The time of the day can be used to advantage in spotting fish. Generally speaking, the hours before mid-day offer the best light and it is a characteristic of many New Zealand districts that the calmest part of the day is the morning. At times in the afternoon, there is a tendency for a breeze to get up which can ruffle the surface and obscure vision.

I always like to view a pool with some background. If I can, a tree, a log or a bank is convenient to rest against while watching a pool. In this way the angler is not silhouetted against the light background of the sky and is therefore less likely to be seen by a trout.

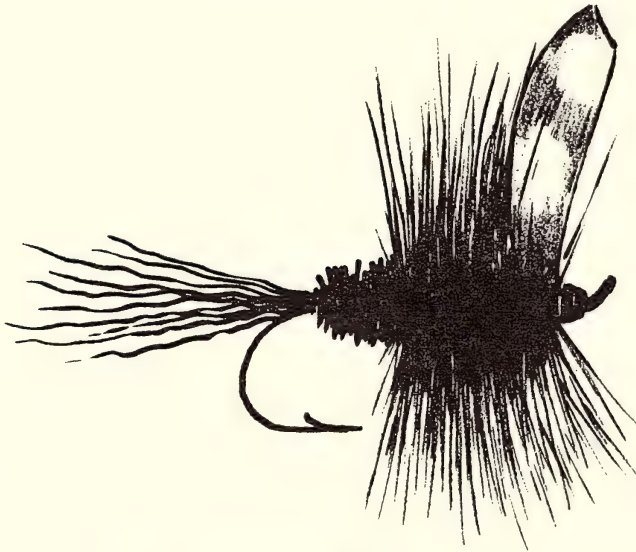
Shading the eyes gives better vision with polaroids and to conveniently achieve this shading of the eyes, a wide-brimmed hat is ideal. In any case the use of a hat on a sunny day offers welcome shade for the face from the sun.

The spotting and stalking of fish is a fascinating way to fish for trout. It enhances the catching of trout to such a degree that some individuals will not try for a trout unless they can see it.

There is no need to let it dominate your sport to this degree if you do not wish, but to any angler it increases your chances of catching fish . . . if you can spot them first.

ANOTHER PATTERN FOR THE FLY-BOX

by KEITH DRAPER



THE SUMMER FLY; DRY FLY

This is a nondescript pattern of my own devising. The tail is a small bunch of deer hair of a bright reddish brown. These can be found in the coat of a summer Sika skin or a summer Red deer skin. The body is short and is tied of bronze herl with the rest of the body to the shoulder being palmer tied with three good bright ginger or red hackles. A wing of hen pheasant wing quill is added to complete the fly.

This fly was the result of no idle fancy. Deer hair makes as good a tail for a dry fly as any other material I know. It's stiff and will set a fly up on its tail nicely. If a dark fly is being tied, these can be found in the rump patch of a Red deer.

The short body of bronze herl adds sparkle and that metallic glint that goes with the body of so many natural insects. If you stop to think, many of our general patterns use this material.

There is enough shank left for a good thick buzz hackle and only the brightest are good enough. Glint is once again the thing to try and obtain.

The buff coloured wings I have found to be the best markers of the lot. I think that they're superior to white really. I know I can see them more easily as the fly rides in fast water. White wings are often lost against white water, but the buff pheasant wings are pale enough to stand out very clearly. That is their only purpose.

I have had more success with this fly tied on a No. 12 or 14. It does have a drawback though: small fish can't resist it. I am pleased to be able to relate that their bigger brothers will also take it very well. It isn't intended that the fly should represent any insect in particular. I consider it to be a general use summer fly

when hundreds of species of insects crawl, scuttle and fly in the environment. When one of them lands on the water a trout at his station is seldom reluctant to take a victim of misfortune simply because he has never seen one of its specie before.

I can recommend this pattern because it has the qualities of several good patterns blended into one.



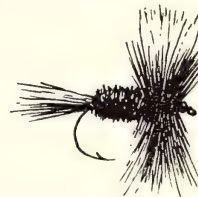
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WHY YOU MISS

If some keen shooter made an attempt to compile statistics to show the number of cartridges it takes to bag the average duck, he'd have an unpleasant shock. As a shotgunner, how many do you think? Four cartridges per duck? No, much too low for the average shooter, I consider. I would say it would be nearer eight, or even more. That's a lot of ammunition, but when birds are really in the air it's surprising just how trigger-happy some gunners get.

During a recent shooting season, for instance, a party of four sallied forth on opening morning with 100 cartridges each. Two of the party were reasonably good shots; one fairly good; and the other had never previously shot at a duck, although he had done a little rabbit shooting. That night, the party returned to camp with 27 birds and twelve unfired cartridges, which worked out to approximately 14 cartridges per bird.

But, it should be explained, conditions were not in favour of this party, for it was a fine morning and the birds were flying high. And handicapped as they were with crude decoys which no self-respecting mallard would respond to, they could hardly have hoped to lure many birds within reasonable gun-range. They did get a few mallards, but most of the bag consisted of grey duck. The five other parties shooting on that piece of water did a little better, but only one reported that they had averaged a bird for seven shots.

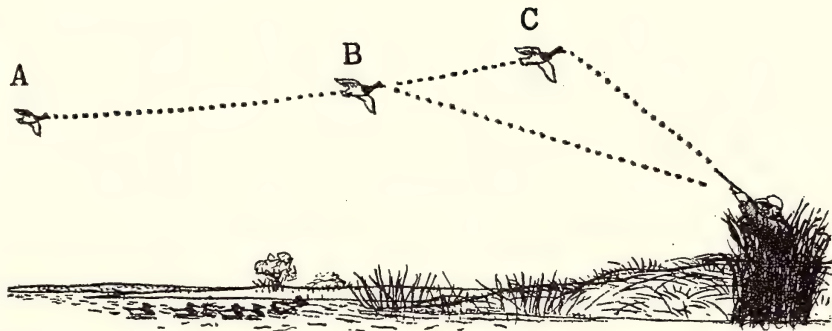
In wildfowl shooting, in particular, a certain number of misses are inevitable, but when one blasts away a box of shells for two or three birds there's certainly something wrong. But just what is wrong, is it the gun or you?

Misses can be divided into three main categories, any of which could be the answer to any individual gunner's missing problems. They are: 1 — Aligning errors; 2 — Leading errors; 3 — Range errors.

The Importance of Gun-Fit

Unless a gun is pointed or aligned properly the gunner has no hope of connecting with his target, so we'll discuss this angle first. To be really effective, when raised to the shoulder a shotgun should point, and throw its charge, exactly where the shooter is looking at the split-second he pulls the trigger. This shows the importance of gun-fit, for no shooter can expect to be successful unless his gun comes up right. A cheap \$50 gun that really fits you is much better than a \$400 gun that doesn't.

The fitting of a gun is a broad and complex subject, being determined by a combination of its specifications to suit the physical make-up of the person concerned. However, the dimensions of the stock which determine the length of the pull, the drop at comb, the drop at heel, and the pitch are the better known and important of these specifications.



Most shooters miss because they track too long, particularly on this type of shot. When a bird swings over your decoys like in the illustration, make your swing one quick movement from B to C.

The drop of the comb is important, more so than the drop at the heel, for in some respects the comb serves almost the same purpose as a rear sight, allowing just the right cheek placement and controlling the relationship between the line-of-sight and the line-of-shot.

For instance, a high comb will cause overshooting with some individuals; when it is too low, undershooting invariably results. All combs will not suit all shooters. For example, he that has a lean or thin face will need a thick or full comb to throw the line-of-shot in the same vertical plane as the line-of-sight. Conversely, the full or fat-faced individual will shoot a lot better with a thin comb.

None the less, personal choice does sometimes enter into the question. For instance, one shooter may prefer his gun to shoot plumb into the centre of the pattern at the point of aim. For this he selects a drop of comb which allows him an effortless, level sighting over the rib. Others may want the centre of the pattern thrown slightly higher than the point of aim, which is particularly useful when it comes to rising targets.

Gun-fit is highly important, but it is only one of the factors that cause inaccurate aiming. Another can be too heavy a trigger pull; about 4–5 lb is the usual, although I much prefer them a little on the light side.

How Much Lead?

How much lead one should give on a crossing bird is an oft-debated question, and one hears a number of confusing estimates. One good shot may maintain that he allows no more than about an inch or two ahead of the bird; another that he allows no lead at all; others believe that they make allowances in various distances up to several feet. One chap I know swears that he gives 10 feet lead at birds crossing at a range of 40 yards. Which one is right?

There are various methods of allowing for the distance travelled by the target from the time you decide to fire until the shot finds its mark. One is to throw up the gun and take a snap-shot a pre-determined distance ahead of the bird, hoping that the shot will intercept the target in flight. Another is to smoothly swing the muzzle from behind and parallel with the target and, speeding up the swing a little to reach the bird's beak, pull the trigger. Even when the trigger is pulled the swing should be continued, otherwise the charge will be behind the target.



(Left)—Shows actual bulk of a mallard drake. (Centre)—Showing outline of bird's body when plucked. (Right)—Vulnerable parts. Pellets in black area may kill or disable. Those in the cross-hatched areas may bring the bird down. Hits in the shaded or white areas will not normally bring the bird down.

Physical and mental reactions differ in individuals, some swinging the gun quicker than others, so it will be understood that the **apparent** lead will differ. I swing fairly quickly myself, and find that for shots at moderate ranges all I need to do is to swing to the tip of the bird's beak before touching off the trigger.

Without delving too deeply into the mathematical angle of lead, let us see about just how far a bird travels while we bring up the gun and actually fire at it. Let us assume that a fast bird is moving right across in front of us 20 yards away, at 60 miles an hour, or 88 feet per second. As the bird comes into range the gun leaps to our shoulder and, coming up from behind the bird, we swing and pull the trigger. To the shooter, his physical and mental reactions appear to be a split-second operation. But are they?

Scientific tests with special electronic timing devices have proved that there is a time-lag of approximately one-fifth of a second between deciding to take the shot and pulling the trigger. Added to this, there is also a mechanical delay time of .011 seconds, primer ignition and charge travelling along the barrel .003 seconds, and a shot flight time to reach the target of 1/15 seconds.

It should be pointed out that shot charge velocity varies a little with the size of shot, but assuming it is travelling at about 900 feet per second over the estimated range of 20 yards, the target has moved up six feet while the shot was travelling to it. Thus it will be seen that unless the gunner is a good snap-shot, or swings his gun progressively past the target, his shot charge could well be many feet behind the target.

The advantage of learning to swing your gun—or follow-through, as some call it—is evident, particularly on close-range shots. By bringing your gun up behind the bird and speeding up until you pass him, gives an "automatic" lead governed more or less by the speed of the target. This does not apply quite the same to the longer ranges, for a distant bird, although travelling at the same speed, moves across your "arc of vision" more slowly.

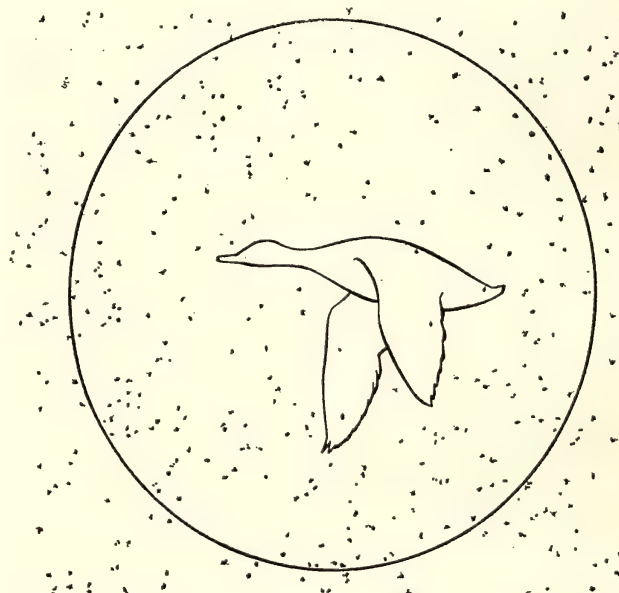
Being further away, the distant bird appears to be travelling more slowly, consequently your swing is slower and the apparent lead reduced accordingly. Further, the shot is slowing up considerably at the longer ranges, hence one has to touch off the trigger at least a foot or two ahead of the target.

And how is one to judge distance, it might be asked? Unless the gunner has done considerable waterfowl shooting this is difficult, if not impossible, and I doubt very much whether five per cent. of gunners can tell with any certainty whether a bird is 40 or 50 yards away. Indeed, unless a bird is flying at an acute angle even the experienced shooter cannot tell with any

degree of certainty whether it is flying straight across or at a slight angle when he makes his split-second lead decision. There are no set lead and elevation tables for the varied shots presented in this type of shooting, and even if there were one's mental and physical reactions could not apply them. All we should remember is that for birds under 25 yards all we have to do is to pull the trigger as the muzzle touches the end of the beak, and for longer ranges allow anything from a bird length or more.

The Question of Range

While many birds are missed because of failure to allow sufficient lead, considerably more are missed by firing out of range. The maximum range at which any gun will kill is dependent on three factors—choke, shot size, and load. Let us discuss shot size first. A few years ago experiments were conducted in Britain and U.S.A. on mallards released from known distances



Actual pattern sheet showing how bird could fly through pattern and not be dropped.

with cartridges loaded with $1\frac{1}{4}$ oz. No. 3 shot. These tests revealed that at 40 yards a 97 per cent. kill was possible, and at 60 yards 70 per cent. Outside this distance only a few odd birds were dropped, although of course many were hit. Using No. 6 shot, 90 per cent. were dropped at 40 yards, and only 22 per cent. at 60 yards. These tests were all shot with full-choke guns and are an average over a series of experiments. Incidentally, the gunners were all crack shots and knew almost exactly the range the birds were released.

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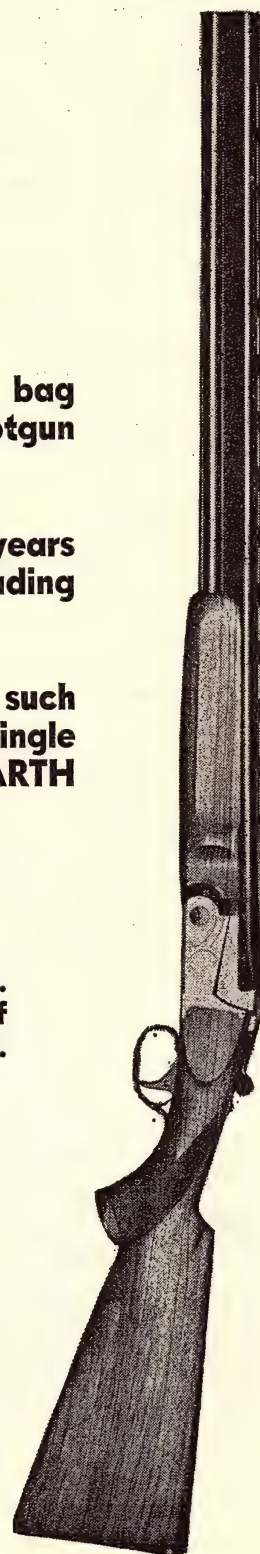
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I have always believed 50 yards to be the absolute maximum distance for shooting at a duck with No. 6 shot with a full-choke barrel, and a few yards less with a modified choke. Larger shot sizes will kill a little further, but the pattern is sometimes so open at the longer ranges that a bird can either be missed altogether or be hit with just an odd pellet or two without any immediate effect. Later the bird might die, and these days when we've got to practice conservation this is not good business.

While the smaller shot sizes do not have the energy to penetrate deeply at long ranges, they are quite adequate for short-range shooting, like over decoys. If one has a gun with one barrel modified choke and the other full-choke, it would be better to use No. 6 shot in the modified and No. 4 in the full-choke. With single barrel guns, such as repeaters and autoloaders, No. 6 would be the best for shooting over decoys, and No. 4 for flight shooting when the birds are flying a wee bit high. But one thing to remember is, the smaller the shot load the less the potential killing range. For instance, although the $1\frac{1}{4}$ oz. load might kill fairly consistently, at, say, 40 yards, the 1-1/16 oz. load would only give consistent results at about 35 yards.

Good Pattern is Essential

The only qualification to any arbitrary selection of shot for any specific game lies in the peculiarities of shotguns themselves. Some guns will handle only one or two shot sizes well, strange to say. Others may have a versatility which enables a variety of shot sizes to be put through them and still get uniform game-killing patterns. If you find that your shotgun patterns better with No. 6 shot, stick to that close-shooting pattern.

A ragged pattern of even a larger size shot hasn't the killing potential of an even, dense pattern of 6's, all paper pattern ballistics to the contrary.

Of course, if you are using an autoloader or pump gun, the addition of a choke device will provide a greater selectivity of pattern, and thus you may hit on just the right degree of choke to handle any particular shot size. But with the side-by-side gun it is different, for one's meat may be another's poison. I have seen, for instance, two guns by the same maker, with identical borings, yet one will throw 100 per cent. of the total of No. 6 pellets through the full-choke barrel at 30 yards in the prescribed 30-inch circle, yet the other gun only patterned 80 per cent. But with 4's that same gun put every pellet within that 30-inch circle. Why? I must confess I don't know; neither can ballistic experts enlighten us, but one thing is evident, that for the best results we must pattern our gun with the various shot load sizes.

The patterning of guns is normally done at a range of 40 yards; this range enlarges any defect in the pattern. A piece of paper about 48 inches square should be attached with drawing pins to two stakes or some other support. A small bullseye can be painted on the paper, and the gunner should bring up his gun and, without taking definite aim, fire a shot at the bull. A 30-inch circle should then be drawn around the densest part of the pattern.

The densest part of the pattern might not be direct on the bull, note whether it is high, low, or to the right or left, should be an indication of just exactly where

(Continued on Page 32)



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DEER STALKING IN NEW ZEALAND

An account of a Wapiti and Moose hunting trip in the Southern Sounds, Easter, 1923, from the diary of the late V. E. Donald.

9th May, 1923.

I have just returned from our wapiti and moose hunting in the Southern Sounds, and have seen one of the most glorious sporting districts it is possible to imagine. We left Manapouri and went overland via Murrells track to Deep Cove at the head of Smiths Sound, some twenty miles inland from the open sea. Here we picked up Murrell's 30ft. oil launch, and after cruising round some of the most glorious scenery in the world, round the various arms and down into Doubtful Sound, we turned north and made for the open sea through Thompson Sound.

Leslie Murrell and I were the only occupants of the launch, and we were kept busy feeding the fishes and managing the launch till we reached George Sound, where we hoped to get our wapiti stalking. Entering these Sounds is a most glorious sight with their high mountain all around, and the virgin bush running right down to sea-level. We passed numerous sea birds and penguins all the way up this Sound and saw many pigeons, kakas etc. in the bush, while above and ahead of us were the snow-topped mountains.

We reached the head of the Sound about 4 o'clock and after catching a couple of blue cod for tea, we went ashore and erected our camp. We just managed to get the tent and our bunks fixed by dark, and after boiling the fish and having tea, we turned in to be ready for a daylight start in the morning.

At daylight we started off for Lake Catherine, and soon came on to wapiti signs, and we realized that we were fairly started on the first wapiti hunt in the Southern Hemisphere. After some strenuous going through the bush we reached Lake Catherine about 10 o'clock, and were overjoyed to spot a wapiti bull through the telescope away at the head of this beautiful lake, about a mile and a half off, lying down on a sandy beach. The going round the side of the lake looked alright, but we soon found that the bush covered some pretty stiff bluffs, which we had great difficulty in getting around, one of which we managed by getting into a tree-top and climbing down.

However we got to within about 300 yards after about two hours crawling, climbing and sliding, and decided that we would have to take a long shot. It was here that I blessed the .280 Ross rifle which has a very high velocity and is dead in up to 400 yards, and would not be affected by the breeze which was blowing up the lake. Our luck was in and the first shot effective, and we shook hands on the first bull wapiti. He proved to be a fine well-grown bull with 14 points, length 53 inches, spread 49, and weight 341lb.

We had our lunch, took some snaps, then removed the head and started on one of the heaviest carry in's

we have ever had. In many cases we had to wade out into the lake, and other times passed the head from one to the other round the bluffs. We reached the bottom of the lake and decided to go down the river, which meant crawling over and sliding down rocks, so as to avoid carrying the head through the thick bush. We arrived at camp just at dark, with sore shoulders but very joyful hearts.



Photograph shows the first Wapiti ever shot under licence in the Southern Hemisphere.

Next day we decided to explore Lake Alice, and although we did not find traces of wapiti so plentiful here, we were rewarded with the most glorious scenery I have ever seen. This lake is about 300 feet above the sea, and has a most beautiful fall into the Sound. It is quite close and could easily be stocked with rainbow trout. We decided that the sides were too precipitous to get around, although the head looked splendid stalking ground through the telescope. Some day this lake will have boats on it and be famous for its trout fishing, as it is alive with minnows.

We returned to the launch and made for the south arm of the Sound, as we wanted to know how far the herd had spread. After going about two miles into the bush we decided that although the wapiti had reached there, they were not in sufficient numbers for us to have a chance of getting one. We had already decided that we were too late in the season, and that the bugling was over, which made our chances very small in that dense bush country. After examining Ancorage Cove we returned to camp.

Next morning we started up to Lake Catherine again, and going up the river above the lake a bull must have heard us in the bush, for he bugled and fell to our rifle



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within three minutes. He proved to be a 15-pointer, spread 53 inches, length 49 inches, and weight 27lb. Not so heavy as the other, but a beautiful even specimen. This bull was a wonderfully well-grown vigorous animal, and I should say not more than five years old.
300/3/71

Next day we decided for the tops about 4,300 feet up, where we expected to get open stalking. We arrived there about eleven o'clock after a most strenuous climb, and were rewarded by the most glorious view it is possible to imagine. Away to the north were thousands of snow peaks standing up with the full clear sun shining on them and glaciers running down, some for miles. To the west we could see away down the Sound to the open sea, and close south were some of the finest basins for stalking I have ever seen. Strangely enough there were no wapiti in them, although they were full of snowgrass, which is fine feeding for deer. Of course we don't know the habits of wapiti yet, but I think they will take to the snowgrass when they have cleaned up the bush feed. We took snaps and returned to camp after a very strenuous day.

Next day we broke camp and started round in the launch for Caswell Sound, and reached the head just at dusk. We decided to sleep on the launch and got an early start for Lake Marchant. On the way we caught a kakapo (our great mountain parrot which is very rare), and arrived at the lake about 9 o'clock. We sat down at that outlet and admired another glorious view. A bush clad island right in front of us and the lake running away back into the mountains. Round this island we noted the following waterfowl, black swans,

grey duck, paradise duck, black teal, red teal, blue mountain duck and crested grebe and dabchick, which are very rare.

After much discussion we decided to try the left-hand side of the lake, and proved that our luck was in. A bull which we would certainly have missed in the bush bugled, and we landed him within a few minutes. Our bush stalking experience with red deer had stood to us with these last two bulls, and we had taken our number—one each for ourselves, and one for the Government with this one. He proved to be another young animal with exceptionally heavy antlers. His points were 11, weight 35lb, length 48 inches, and spread 40 inches. Although hit behind the shoulder and breathing through the wound, he managed to get into the river, which was about a chain and a half wide and about 8ft. deep, and finished up against a log on the opposite side. I suggested to Murrell that I should hunt for a vine to reach him, and he took the hint and stripped off. The water was icy and the sandflies troublesome, and when I arrived with the vine he was standing on the log holding up the antlers, calling for me to throw the vine. I chaffed him, and got the camera and snapped him first, and then we hauled him ashore with the vine. We had to skin the head and go back for it next day, as we could not have carried it that night.

From Caswell Sound we returned to Deep Cove, made fresh bread, and then started off for Dusky Sound to see if we could bag a moose. Arriving there just at dusk we had to stay on the launch, and landed next morning. We soon found that the moose had multiplied and their tracks were plentiful. Unfortunately we were too late for the rut, and after four or five days solid hunting we decided that in that dense bush with such a limited number that could be there (there were only three cows and four bulls liberated thirteen years ago), that we had no chance of getting a head, although we were satisfied that they had increased quite up to expectations, and had spread over a considerable area.

We left the head of Dusky about nine o'clock, and had a most glorious view of this magnificent Sound. Towards the entrance there appeared to be dozens of small islands all bush clad, making the most beautiful reflections on the water, which is almost invariably smooth in these sounds. At four o'clock we arrived at Pusegur Point lighthouse, at the head of Preservation Inlet, and anchored for the night. We went up to the lighthouse and took their mails, as they are only called on four times a year.

Next morning at half past three we started for River-ton, about a seventy mile run in the open sea, and arrived there after a 12-hour run in a good sea, starting on again at four the next morning for Invercargill, where we arrived safely after a three hundred mile trip in our small launch, with the first wapiti heads secured in the Southern Hemisphere.

KEEP NEW ZEALAND GREEN
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SALTWATER SPECTACULAR by GARY KEMSLEY

Saltwater fly fishing is only in its infancy here in New Zealand. However there is a terrific potential for fly fishermen, and I am slowly searching out different fishing spots and different species of fish that are willing to accept a fly cast into the salt.

My introduction to saltwater fly fishing was self induced. One day when I was laid up in bed I decided that one species of saltwater fish was suited to the fly. This fish, the kahawai, feeds mainly on small baitfish such as herring, smelt, whitebait and eels which can be imitated by the fly; therefore I selected this fish for my introduction to this sport.

The spot I chose to initiate this method was the entrance to a large tidal flat where there is a bridge spanning the flow of water. I had caught many kahawai here before on live bait and spoons. I timed my arrival to the top of the tide, selected a large silver streamer fly and made my first cast across the current. I stripped off another yard or so of line and tossed this into the current to make the fly sink.

As I waited for the line to straighten, a man fishing on the other end of the bridge hooked a kahawai on spinning tackle and moved off the bridge to play and land it. With the line taut in the current, I started a slow hand twist retrieve and almost immediately a fish hit the fly and raced away from me. I jumped off the bridge, over some rocks and down to a sandy beach to play the fish. After a 50 yard run the fish broke through the surface in a three foot jump and revealed itself to be a kahawai of about six pounds.

Immediately I was aware of the fineness of my cast which was only five pound breaking strain. The fish spent more time in the air than in the water for the next few minutes and put up a fine fight; this is unusual for kahawai, as they will only jump once or twice when hooked on spinning tackle. Maybe it was because he could not feel any weight in his mouth that made him jump. After landing that fish, which was my first on fly tackle in the sea, I resumed my position on the bridge and proceeded to take six more kahawai all about the same size, before the tide started running strongly and turned the water chocolate coloured.

Since that day six years ago, I have taken countless kahawai from that bridge on the fly. Once while fishing in the same spot I let the line sink down to the bottom while I lit a cigarette. I crawled the fly, a brown streamer along the sandy bottom. A fish snatched the fly hard and ran straight under the bridge, by running off the bridge I turned the fish before it could get among the piles. The fish then changed tactics and headed out to sea. I was waiting for it to jump, thinking it was a kahawai, but the fish just kept on going until I had very little line left. I held on and the fish finally turned. About twenty minutes of this give and take fighting, I drew the fish on to the beach and found it was a 3lb trevally.

One day while sitting on the bridge at Westshore waiting for the tide to run so that the kahawai would

move in to feed, I noticed a few splashes on the surface about 30 yards away which were slowly approaching the bridge. As they came closer I identified the fish as being garfish, or piper as they are more commonly known. They were obviously feeding on plankton. Quickly I changed the large streamer I had on my line for the smallest fly I had in my box, a brown beetle size 12. A couple of false casts and I laid the fly six feet upstream from the front fish of the group which numbered about eight or nine. The fly, though sunk, drifted perfectly through the fish without a hint of drag. The fish didn't pay the slightest attention to the fly and carried on with their slow advancement to the bridge dimpling the surface as they approached.

I cast again and again without any response. Then I turned to my companion and told him the obvious of what had just elapsed. As I spoke the fly having finished its drift through the fish hung in the current, immediately three or four fish rushed in to grab it, a quick flick of my wrist and I was fast to my first garfish on fly tackle. The fish was only about 12 or 14 inches long but put up a spirited fight, throwing itself clear of the water several times with strong runs in between.

When I landed the first one and examined it, the resemblance to a swordfish was evident. Forward of the head was a sword fully one fifth the length of the body of the fish which was obviously built for speed — long, slim and silver.

By casting and holding the fly in amongst the fish I had a strike every cast, until after I had taken five garfish I hooked a sixth which was only about seven inches long. The fish jumped once and on its re-entry into the water, it met a large pair of jaws belonging to a barracouta which tore it from the small hook.

I quickly changed my fly back to the large streamer and cast again. The fly alighted on the water and was immediately pulled under by the current. I let the fly sink for about three feet and then started a fast hand stripping retrieve; after I had retrieved about ten feet of line I met solid resistance. I struck and almost in the same instant a barracouta about four feet long cleared the water in a long graceful arc. The barracouta splashed down and took off on a long run. Midway through the run, the line went slack and I realised that the barracouta had cut through the 4lb tippet with his sharp teeth.

After tying on a new streamer, I resumed casting and this time I kept the fly on the surface and watched spellbound as three kahawai approached from different angles. The fastest fish grabbed the fly and hooked himself as he turned and raced away. I let him run and followed him as he raced away down the current. I jumped over rocks on the shore almost unconsciously

and all the time I kept the line tight on the fish. When I reached a small sandy beach, I stopped and halted the kahawai's run with a constant, ever increasing pressure on the line with my fingers. Now that the fish was stopped he changed his tactics and started jumping, not just clearing the water but greyhounding twenty and thirty feet across the water on his tail. This soon took the fight out of him and he started circling me, all the time beating the water with his tail. I soon led him into the shallow water at my feet.

A large amount of splashing later, I held the fish up and admired it. The kahawai, even though I didn't weigh it, must have been eleven or twelve pounds. On this tide I managed to catch two more kahawai before the water discoloured with the outflow from the shallow mudflats.

The area where this took place is no isolated paradise visited by the few fishermen. The main highway north from Napier passes over the bridge I fish off, and all around the mudflats there is a slow encroachment of industrial buildings. However, there is no noticeable depletion of fish stocks even though there is an ever increasing discharge of waste from surrounding factories.

At the moment there are no shops that I know of catering for saltwater fly fishermen, so my fishing is done with large trout flies which do the job well.

WHY YOU MISS

(Continued from Page 28)

your gun is putting its shot. It may take several attempts to determine this, but it's well worth it. To count the number of pellets, quarter the circle with a pencil. Below we list the number of pellets in the various game charges as a guide.

Oz. of Shot	SIZE OF SHOT					
	3	4	5	6	7	8
1-1/2	210	255	330	405	510	675
1-7/16	201	244	316	388	489	646
1-3/8	192	234	303	371	468	618
1-5/16	193	223	289	354	446	590
1-1/4	175	213	275	338	425	562
1-3/16	166	202	261	321	404	534
1-1/8	157	191	248	304	383	506
1-1/16	149	181	234	287	361	478
One	140	170	220	270	340	450
15/16	131	159	206	253	319	422
7/8	122	149	193	236	298	394
13/16	113	138	179	219	276	366
3/4	105	128	165	202	255	338
11/16	96	117	151	186	234	310
5/8	87	106	138	169	212	282
9/16	78	96	124	152	191	254
1/2	70	85	110	135	170	225

However, despite the fact there are gun-fit, lead and pattern problems to contend with, I believe more cartridges are wasted by shooting at birds out of range than for any other reason. With some shooters, the sky's the limit, and these individuals not only push the birds higher still, spoiling the shooting of others, but if an odd pellet or two does connect it could result in

crippled game which will eventually die—and no true sportsman can condone this.

Shotgun shooting cannot be taught by medium of the printed word, that's for sure, but if shooters would only give serious consideration to the many reasons why they miss their bag would be heavier and their cartridge expenditure lower. The hunter who takes his time and makes sure he is on target and that it is within range before he fires, will be ahead of the chap who blazes away for the sake of hearing the bang of his gun. The former is a true disciple of conservation; the latter is sabotaging conservation efforts.

WHAT IS A "ROYAL" HEAD?

Question.—Could you please tell me what is actually a "royal" deer head? I have been told that it is one crowned with four top tines, but I'm not certain that this is strictly correct.

Answer.—A "royal" red deer head is one of 12 points, consisting of one each brow tine, bay (bez), and tray (trez), and three tines on top which are known as the cup, making six tines, or points, on each antler. An "imperial" head is one of fourteen points, having one each brow, bay, tray, and four on top of each antler.

* * * *

CURING SKINS

Question.—I intend to cure some goatskins, and would like to know the easiest way to go about it. I don't want a complicated process, but something that is simple and cheap. Can you help me?

Answer.—There are several different processes for curing skins, but I think the following is the most simple of all. It makes quite a good job, but as with all formulas the softness of the finished products depends largely on how much working the skin is given in the final stages.

Mix about 1lb of baking soda and kerosene into a smooth paste. This should not be too thin, but just thick enough so that it can be painted thickly on the skin. Now lay the skin on the floor of a shed away from the sun. Paint this mixture on daily for ten days, then scrape off and work with pumice or wire brush until quite soft and pliable.

* * * *

TACKY OILSKIN

Question.—I have a tacky oilskin and I am wondering whether it could be treated to make it wearable again. It has not had a great deal of use and would give quite a lot of service if it could be treated.

Answer.—Oilskins can be washed in benzine then dried and reproofed, but unless the coat is in exceptionally good order it is not worth going to all this trouble for. In my case they are never the same after being treated.

"A FISHING INTERLUDE"

by "SNOWGRASS"

It was quite early in the afternoon when we arrived at Paekakariki. There were two or three hours left before high tide, and the sea, shot with sunlight and a light rippling breeze, looked promisingly fresh.

You could almost feel schnapper in your bones, especially if you wanted to and if you had been flogging the lifeless Wairarapa rivers unsuccessfully for the past two days the way we had. Mark scratched his head, cast a searching gaze over the water—the way the shrewd ones do, to comfort themselves, impress their companions, or both—and we were off with the surf-casting gear down along the beach. I carried the rods; Mark took the tackle bag and the big gaff. (It was really far too big and something of an embarrassment. First he held it in one hand, then the other. As we passed the families picnicing among the boulders near the road, he grew increasingly self-conscious and clutched the gaff awkwardly. It was the sort of embarrassment that is catching, and we were both glad to get out on the rocks where our eccentricity was purely our own and unobserved.

The sea made a rich sucking sound among the rocks. Sunlight shimmered lightly on the surface, just slight enough to let you see down through the clear water and mark where the snags were likely to be. My rod was a two-piece fibreglass one, and something of an enigma: built extremely well by an unknown maker and costing \$6 in a small Palmerston North shop the previous year. It was ideal for the rough work I hoped the sea would provide today. Mark had a similar one, though heavier and much more expensive.

We fished with 8 pound test nylon and running sinkers baited with squid, but there were no signs of schnapper. Out the arm reached, the line whirled off the spool, there was the light plop in the distance, the reel clicked, and the drag was adjusted. The hook and sinker jingled on the rocks to be thrown again with the hypnotic monotony that is the essence of sea fishing. Eyes reeled in the brilliance of sun magnified by water, grew crowsfeet. It went on and on.

There are distinct layers of endurance in this game: the early enthusiasm; its gradual dying and the trance state. Then the realisation of boredom and pointlessness held at bay by the counter-knowledge that it is at this stage that a fish usually decides to take. It is a mock-up of the real thing which comes when finally you start to think of home and how hungry you feel; how in future you will have to waste less of your time doing this sort of thing. And then you can be sure, if its going to, it will happen.

Various deviations from the pattern do come about, but basically it is accurate. I think we were in one of the early stages when the first run began. There were

cries in two hearts stifled by our eagerness to strike—but to no avail. Then the eagerness to rebait, the line whirling off the spool, and the bait is out again. On such occasions you strain every nerve in your body to will the silent monsters on to the hook.

Then once more that excitement that makes you want to be ready to strike at the precise moment; an impossible cat and mouse tension as the tide climbs to its full height. Another strike; you do your utmost, and, inevitably, the disastrous. Then again the interminable waiting.

At slack tide it came to an end. Mark had moved further along the coast. It wouldn't be much use, we except for the top of his rod. We decided to move further along the ledge of rocks and was out of sight admitted, but we had had those runs. There was a chill in the air and it would be nearing dark before we made our way back to the car, but hope springs eternal in the heart of a fisherman, so we packed our gear for one last try.

The rocks were anything but level, and slippery too, below the tidemark. I worked my way along the ledge and cast into the now greying water. The sun had faded. It was now quite cold. Mark, his back to me, was fishing a deep gully between some rocks.

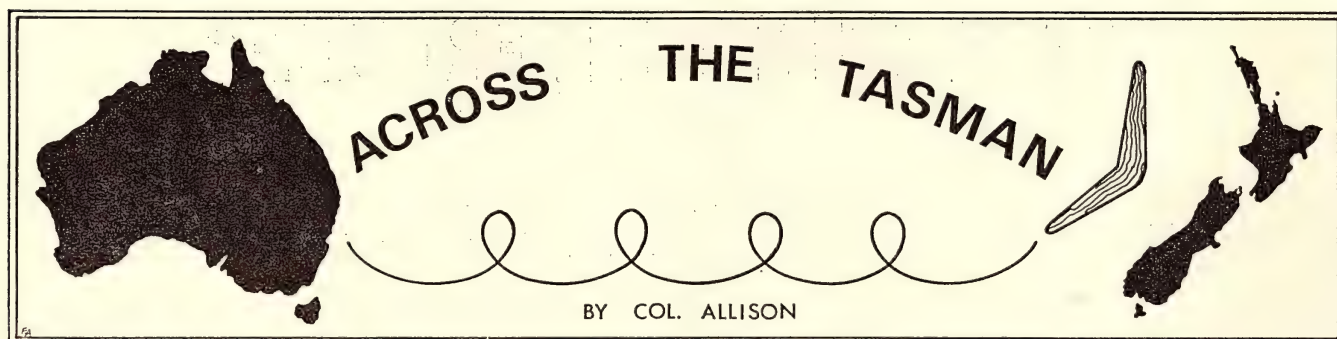
Each cast was automatic and lacked enthusiasm. The bait and sinker whistled out and plopped into a wave. The bale arm had barely gathered in the slack line when the rod bucked in my hand and line sung from the reel. I struck—and time stood still.

He was far out and made his first run straight to me. I kept the line as tight as I could. The rod tip was arched against the golden after-glow of the sun. In my struggle I was vaguely aware of Mark coming with the gaff.

The schnapper was big and strong, and far from being beaten, made run after run, with desperate violence. But gradually each break grew shorter than the one before. I could turn his head. There, I had him the swirl of a wave and the gaff swept round magically to hook him from his element.

As schnapper go, he wasn't big, between seventeen and eighteen pounds. But it was no mean achievement, Mark assured me: a schnapper from an ebbing tide. I'd have lost him without the gaff, I feel sure.

There was no one on the shore to see us return. It was a pity. I strode towards the road, tingling with satisfaction, the big fish weighing heavy in my hand. And Mark walked ahead of me, the gaff silhouetted with proud defiance over his shoulder. Of such things are memories made.



Column No. 23

The Hunter's Hunter:

Kevin Laughton, a principal in High Country Safaris of Sunny Corner near Budgee (N.S.W.) has a very unusual pet—a six months old wedgetail eagle named Hunter. The eagle was caught on a boar-hunting trip to Nyngan when Laughton—using 11 shots from his .243—brought down the 7ft. long by 4ft. 6ins. wide and 18ins. deep nest holding the fledgling 65 feet up a tree.

Since then the eagle has become a family pet and is being trained as a retrieving-hunter of hares and rabbits.

High Country Safaris is run by Laughton and former policeman, Peter Gregory, and will guide tourists after trophies anywhere in Australia for a price.

Hornets Ruin Pork:

Unfortunately, as proposed in another column, I did not get to test my 45-grain Hornet bullets in Victoria on hog deer. I got bogged down in New South Wales during the recent holidays. However, in several hunts lately I came to the conclusion that the "Improved" Hornet in the BRNO rifle would kill a small deer very quickly.

I was pig hunting and in the course of two days I shot 14 porkers—including a big old brindled boar—with the .22 centre fire. Total number of shots fired was only 21 and I can tell you for a fact Hornets definitely ruin pork.

The Black Winchester:

No, it's not a new rifle—but a shotshell. Winchester-Western Australia Pty. Ltd. is bringing out two new shotgun cartridges this year, and one of them is a black-cased plastic cartridge called "Super Ranger".

Friend John Monk believes the shells will sell simply because of the packaging. Looking them over I noted the silver lettering reminiscent of the Legia Star, and I couldn't help but agree. In the field I couldn't tell much difference between these and Super X field loads.

The other shell is a special one for quail and is loaded with only an ounce of shot. These two are well packaged and should be a nice mild shooting load.

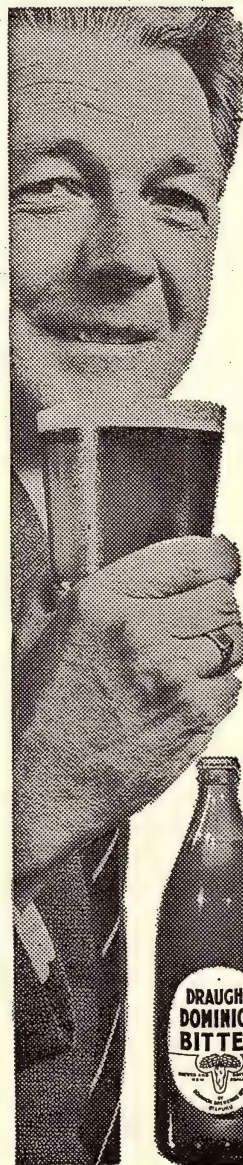
Wetland For Ducks . . . And How!

The best duck season for 20 years is upon eastern Australia where floods have been in force earlier this month. Unlike last year, when the season dried out and the ducks went elsewhere for water, there is a great surplus of water in most of western, northern and southern New South Wales and the top half of Victoria—the "duck bowl" of the nation.

Out along the Macquarie and Castlereagh rivers of

western New South Wales near my home, wood ducks and "niggers" have been very common following an excellent breeding season.

Reports from other areas show that opening day (20 February) was one of the best on record with limits the rule, rather than the exception. During the next three months a bonanza season is tipped.



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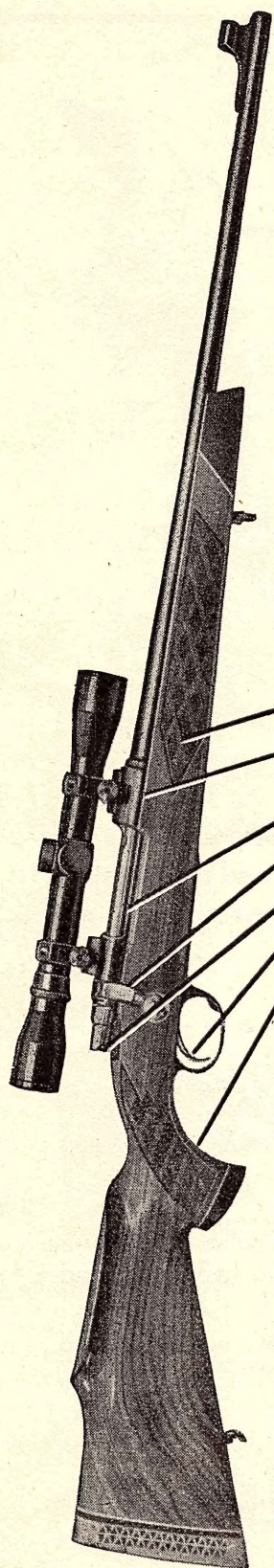
Jim Brady, *'Guns and Hunting'*

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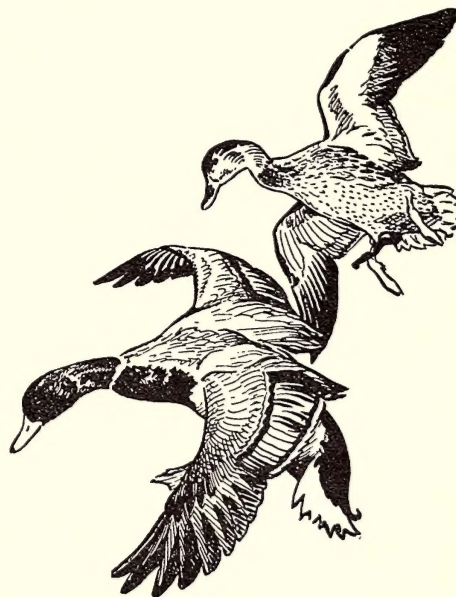
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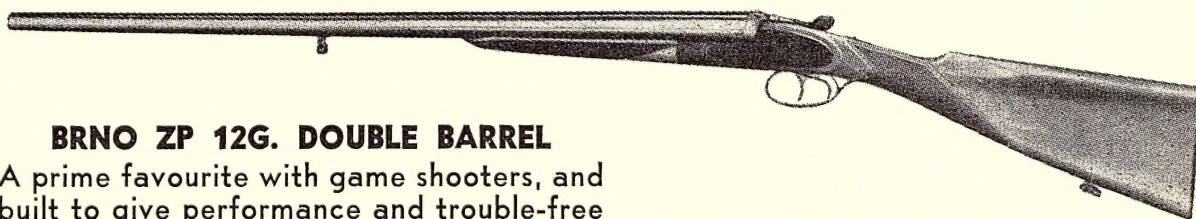
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Overall length 45 inches, weight $6\frac{3}{4}$ lb.

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Thanks, Russia

Christchurch
Press Association

If Ian Ballinger wins a medal at the world shooting championships in Arizona in a fortnight's time he will have Russian ballistics experts to thank for his success.

The Christchurch gunsmith, an Olympic bronze medallist, who leaves for the championships this weekend, had been sadly out of form and with the meeting drawing close the position had become serious. The turning point came when a new Russian rifle passed through his hands.

Took it Apart

Ballinger took it apart, was greatly impressed with the theory of one aspect of its manufacture and in his workshop carried out similar alterations to his own rifle.

"I've never had a rifle

group so tightly," a jubilant Ballinger said on his return from a practice shoot over 50 metres on the outdoor Harewood range.

After scoring a brilliant 597 from a possible 600 he had every reason to feel elated. Making his effort all the more meritorious was the fact that conditions were not easy.

World Record

"I was moving several clicks backwards and forwards for most shots — not waiting to get them away," Ballinger said.

ex "N.Z. Herald" 8 Oct. 1970

The above is no "paid-for advertising" plug. We know Mr. Ballinger only by repute and were as surprised to read it as you will be.

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